



PRINTWORKS

FORMER COX & WYMAN SITE



PRINTWORKS

FORMER COX & WYMAN SITE

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**BARTON
WILLMORE**

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1. INTRODUCTION



1.1 THE PURPOSE OF THIS DOCUMENT

This Design and Access Statement has been prepared by Barton Willmore, with contributions from the design team, on behalf of Thames Properties (the applicant) in support of a full planning application for the development at the former Cox and Wyman Printworks.

This Design and Access Statement has been prepared by Barton Willmore, with contributions from the design team, on behalf of Thames Properties (the applicant) in support of a full planning application for the following development:

“Demolition of existing site buildings and boundary treatments and erection of 96 no. dwellings including associated surface car parking, public realm and landscaping on land at the former Cox & Wyman building, Cardiff Road, Reading.

This DAS is compliant with the Development Management Procedure (England) 2015, and the Planning Practice Guidance 2014 (PPG, Paragraph 031, reference ID 14-031-20140306).

The DAS illustrates the design principles and concepts that underpin the application proposal and address the requirements set out in the PPG website ‘Making an Application’.

Specifically, responding to the PPG requirements ‘What should be included in a DAS’, A Design and Access Statement must:

- (a) explain the design principles and concepts that have been applied to the proposed development; and
- (b) demonstrate the steps taken to appraise the context of the proposed development, and how the design of the development takes that context into account.

A development’s context refers to the particular characteristics of the application site and its wider setting. These will be specific to the circumstances of an individual application and a Design and Access Statement should be tailored accordingly.

Design and Access Statements must also explain the applicant’s approach to access and how relevant Local Plan policies have been taken into account. They must detail any consultation undertaken in relation to access issues, and how the outcome of this consultation has informed the proposed development. Applicants must also explain how any

specific issues which might affect access to the proposed development have been addressed.

(http://planningguidance.communities.gov.uk/blog/guidance/making-an-application/validation-requirements/national-information-requirements/#paragraph_031)

This document is therefore structured in the following way in order to meet the requirements set out above:

In Section 2.0, we have set out our understanding of the context, assessing the site’s immediate and wider context in terms of physical characteristics.

Section 3.0 outlines the relevant planning policy context.

Outlined in Section 4.0, is the design evolution, which sets out the design constraints and opportunities, the conceptual approach and explores a number of design options. In this section we also summarise the community involvement, meetings and presentations we have organised and the formal response to the conceptual design, as well as changes made to the proposal, following formal pre application consultation with officers of Reading Borough Council, dating back to 2015.

Section 5.0 details the design response, which is the subject of this detailed planning application. Here we describe the scheme under the Layout, Use, Amount, Scale, and Appearance sub-headings suggested in DCGL Circular and sets out some of the technical strategies of specific aspects of the design.

Landscaping is outlined in Section 6.0 due to the extent and significance of the landscape design to the proposals.

Section 7.0 sets out the accessibility aspects of the design.

A suite of application documents support the application and this document should be read in conjunction with these reports.



1.2 THE OPPORTUNITY

The redevelopment of the former Cox and Wyman Printworks site presents an excellent opportunity for the creation of a new residential scheme rationalising the interface between the residential community and the industrial estate, and encapsulating a unique set of design criteria to enhance and enrich this site in a key location in Reading.





1.3 SUMMARY OF PROPOSALS

The development involves:

“Demolition of existing site buildings and boundary treatments and erection of 96 no. dwellings including associated surface car parking, public realm and landscaping on land at the former Cox & Wyman building, Cardiff Road, Reading.”





1.4 THE PROFESSIONAL TEAM

The following represents the professional team involved in the planning application for the site:



Barton Willmore

Architecture
Landscape Design
Town Planning
Graphic Design

PBA

Air Quality

Aspect Ecology

Ecology

Geotechnical Engineering

Contamination

Iceni Projects

Heritage

TTP

Highways

Paragon Acoustics

Noise

EB7

Daylight Sunlight and Energy & Sustainability

Development Communications

Public Relations

Hydrock

Utilities

Water Environment

Flood Risk & Drainage

MMA

Lighting

Merewood

Arboriculture

Campbell Gordon

Viability



1.5 BARTON WILLMORE

Barton Willmore is the UK's leading integrated, independent, planning and design consultancy.

Originally established as an Architectural Practice 80 years ago, Barton Willmore has a strong design led approach throughout all disciplines. Our architectural team, which is based across London, Reading, Bristol and Edinburgh, combines high quality, innovative and sustainable design with extensive commercial awareness on projects across the UK. Each member of our team is skilled at guiding developments of all types, from large scale commercial hubs to the refurbishment of listed buildings or development of major integrated urban regeneration schemes.

**BARTON
WILLMORE**





MULBERRY MEWS



ENTERPRISE HOUSE, ALDGATE



THE ARCHES



2. CONTEXT



2.1 INTRODUCTION

This section analyses the existing character and setting of the area within which the proposed scheme will sit. It studies the natural and human history, the forms of settlement, buildings and spaces, as well as its location and the routes that pass through it.

A comprehensive appreciation of the overall site context is the starting point for designing a successful and distinctive place.





2.2 SITE

The former Cox & Wyman Building is situated on an island site to the north of Reading town centre, bordered by Cardiff Road, Addison Road, Meadow Road and Milford Road, and is approximately 1.31 hectares (ha) in area. It is surrounded by housing on Cardiff Road and Addison Road, and on part of Milford Road.

To the east of the site lies an area of existing housing which comprises of dense terraced housing on streets with on road parking. To the north and west are existing commercial units comprising a mixture of buildings predominantly for storage and distribution use. The site therefore occupies a key position between these two distinct residential and commercial areas.

The site is approximately an 11 minute walk to the train station and 10 minutes to the main town centre.

FIGURE 1: SITE LOCATION





Size

The existing building totals approximately 102,000 sq.ft of industrial and office space, of which approximately 77,000 sq.ft is partly open plan warehouse space. There are approximately 30 car parking spaces in total. There is a small yard of approximately ½ acre. (Campbell Gordon Report, 2016)

Building

The building is highly unusual and was built and expanded on a bespoke basis by Cox & Wyman as a book printing works. The main warehouse area has a high number of columns supporting the roof, throughout the space, significantly more than in modern industrial units. There is a low roof clearance of approximately 4.1 meters at the lowest point, up to 6.1 meters elsewhere. The height at the apex is 8.8 meters.

The main warehouse area is divided in parts by some brick dividing walls. There are a number of smaller workshop areas with varying clearance heights, which is unusual and bespoke to Cox & Wyman's historic needs.

The building is in a very poor condition. The main storage / working area has some damage to the floor and roof structure. The roof leaks in numerous places and is in need of complete replacement. The offices are extremely dated and extensively worn, and damaged from day to day wear and tear (Campbell Gordon Report, 2016).

Use

The building was occupied and used by Cox & Wyman since its construction. It was closed in April 2015 due to falling demand for printing services and the company's decision to focus production in modern facilities that the business occupies elsewhere.





2.3 EXISTING AND EMERGING LOCAL CONTEXT

The site lies between residential family housing to the east and the commercial buildings to the north and west. The mainline railway is to the south, beyond the line of terraced houses facing the site from Cardiff Road.

The dense terraced housing on Addison Road and Cardiff Road forms a clear residential area to the east and south of the site with a distinctive Victorian character. This sits between the retail and commercial frontages facing onto Caversham Road and is to some extent focussed on the EP Collier Primary School, which is the most significant building within this residential block structure.

One of the features of this area is that there is no clear demarcation between employment uses and residential uses, with some houses on Cardiff Road

being almost completely surrounded by employment uses, other houses backing closely onto employment uses, whilst one industrial premise is accessed from the mainly residential Addison Road. There is an opportunity with the development of this site to rationalise the interface between employment and residential uses, and to clarify the access routes to these different uses.

The site and land to the north and west, bound by Richfield Avenue and Cardiff Road, is covered by the Richfield Avenue Core Employment Area (CEA) designation under Reading Borough Council's (RBC's) adopted Local Plan policy. As explained in Section X of this document, RBC is proposing through its emerging Local Plan to redefine the boundaries of the Richfield Avenue CEA to remove the former Cox & Wyman site.

The current Richfield Avenue CEA designated area faces onto Richfield Avenue and extends from that frontage deep into the area with the Cox and Wyman site being the furthest and least accessible location from this frontage.

The CEA includes Industrial and warehousing uses, Offices, Trade Counter, Vehicle sales and hire, Retail and Retail showrooms and Assembly and leisure uses. The majority of this area is still in 'Traditional' employment uses, particularly around Cardiff Road, Trafford Road and Millford Road, Richfield Avenue itself is much more mixed. Uses along Richfield Avenue include a casino, retail showrooms and car sales. Meanwhile, Cardiff Road is something of a focus for vehicle servicing uses. (Reading Borough Council, Reading Borough Local Plan Issues and Options, January 2016 Appendix 6)

A significant portion of the Richfield Avenue CEA is within the ownership of the applicant. A separate exercise is being carried out to consider the regeneration of key parts of the employment area it to modernise and consolidate the offer in the estate.

To the north of Richfield Avenue, outside the employment area, is a leisure focus with Rivermead Leisure Centre, a driving range, a restaurant and two hotels, together with considerable open spaces along the Thames, including the site for the Reading Festival.

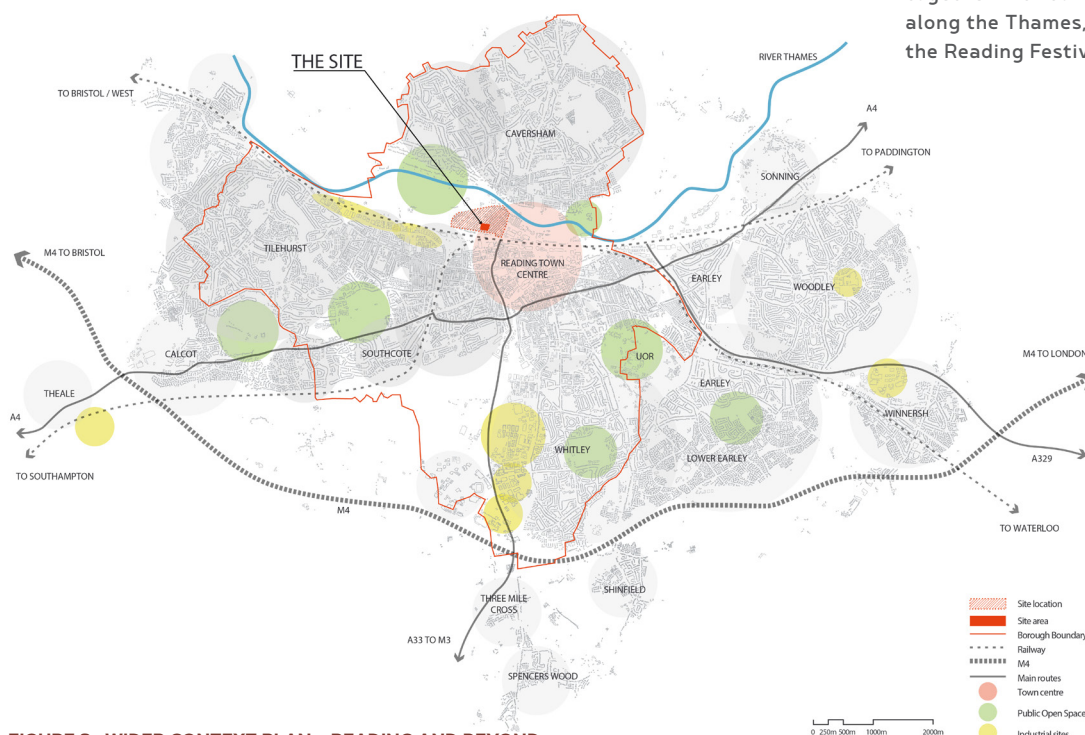


FIGURE 2: WIDER CONTEXT PLAN - READING AND BEYOND



FIGURE 3: CHARACTER AREAS

KEY

- Existing Employment Area
- Site Area
- Residential Area
- Retail Area

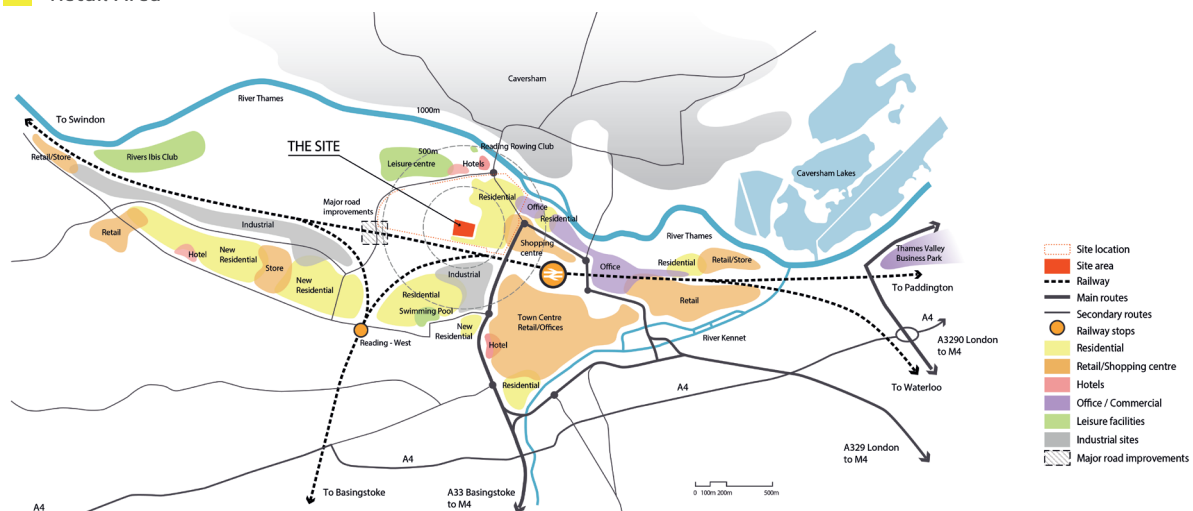


FIGURE 4: SITE CONTEXT PLAN - RELATIONSHIP TO TOWN CENTRE



FIGURE 5: BUILDING USES

KEY

Offices	Victorian terraces
Industrial units	Modern residential infill
Retail/Showrooms	Retail
Vehicle sales/hire	Education
Trade Counters	Self Storage
Leisure	Light Industrial



2.4 HERITAGE CONTEXT

The first evidence for Reading as a settlement dates from the 8th century. In its 1086 Domesday Book listing, the town was explicitly described as a borough.

The presence of six mills is recorded: four on land belonging to the king and two on the land given to Battle Abbey. Reading Abbey was founded in 1121 by Henry I, who is buried within the Abbey grounds. As part of his endowments, he gave the abbey his lands in Reading, along with land at Cholsey. By 1525, Reading was the largest town in Berkshire, and tax returns show that Reading was the 10th largest town in England when measured by taxable wealth. By 1611, it had a population of over 5,000 and had grown rich on its trade in cloth. The 18th century saw the beginning of a major iron works in the town and the growth of the brewing trade for which Reading was to become famous. During the 19th century, the town grew rapidly as a manufacturing centre.

The Great Western Railway arrived in 1841, followed by the South Eastern Railway in 1849 and the London and South Western Railway in 1856.

What is now the inner city of Reading, located just outside the Central Business District (CBD), was largely the result of urban expansion during the industrial revolution and the Victorian era. The legacy of this period is found in the Regency town houses in central Reading and Castle Hill to the west and in the working-class Victorian terraces (mainly two-bedroom houses) in both east and west Reading. Most inner-area housing was constructed between 1850 and 1914. Some light industry and small workshops remain within the grid-iron pattern of terraced housing.



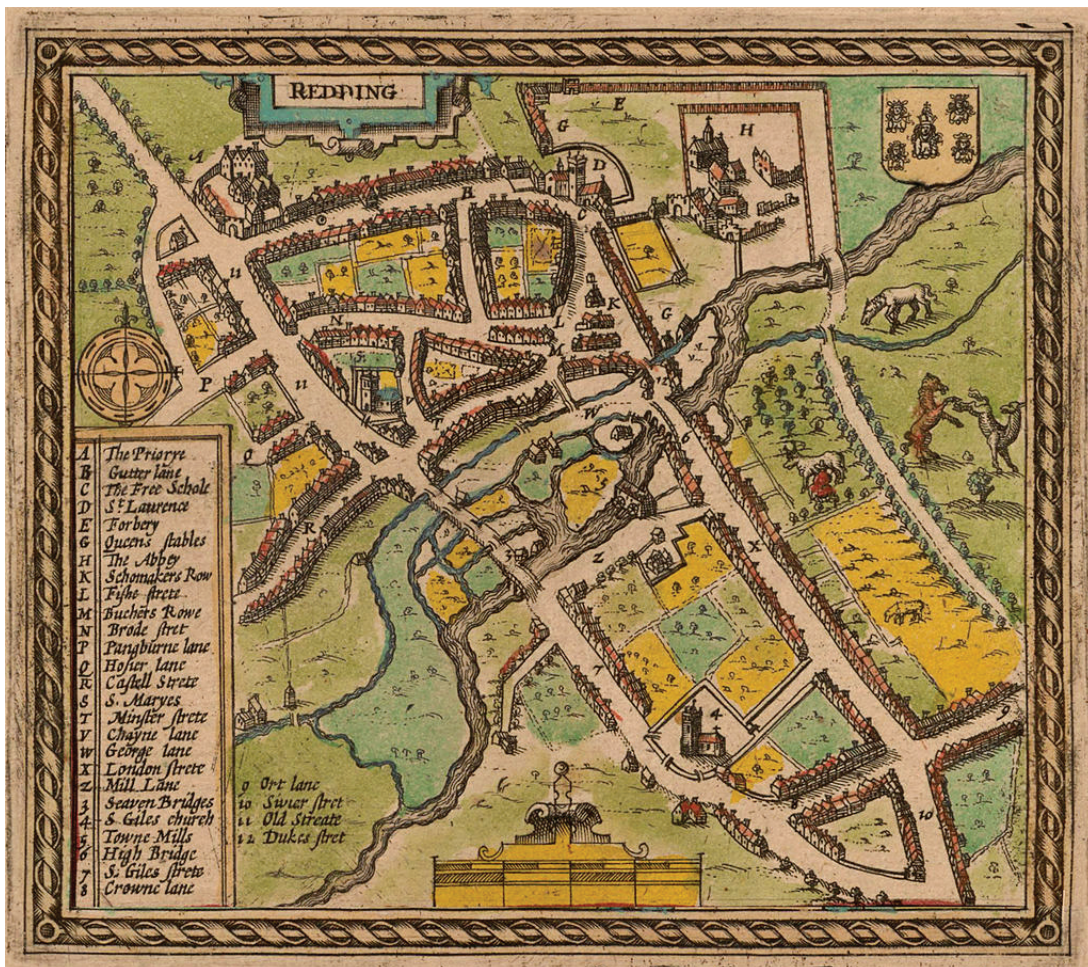
Description of nearby listed buildings

There are no listed buildings in the nearby vicinity of the site. The closest listed structures are the Caversham War Memorial across the River Thames in Caversham to the north, and Regent Place to the south along Caversham Road on the southern side of the railway tracks.

Description of nearby conservation areas

The site is not within or near to any conservation areas. The nearest conservation area is St Peters, again across the river Thames on the Caversham side. Other conservation areas are on the other side of the railway lines, St. Mary's Butts/Castle Street and Russell Street/Castle Hill.

Please refer to the full Heritage Statement accompanying the application for more information.



1611 JOHN SPEED MAP OF READING







2.6 CONTEXT APPRAISAL AND ADJOINING BUILDINGS

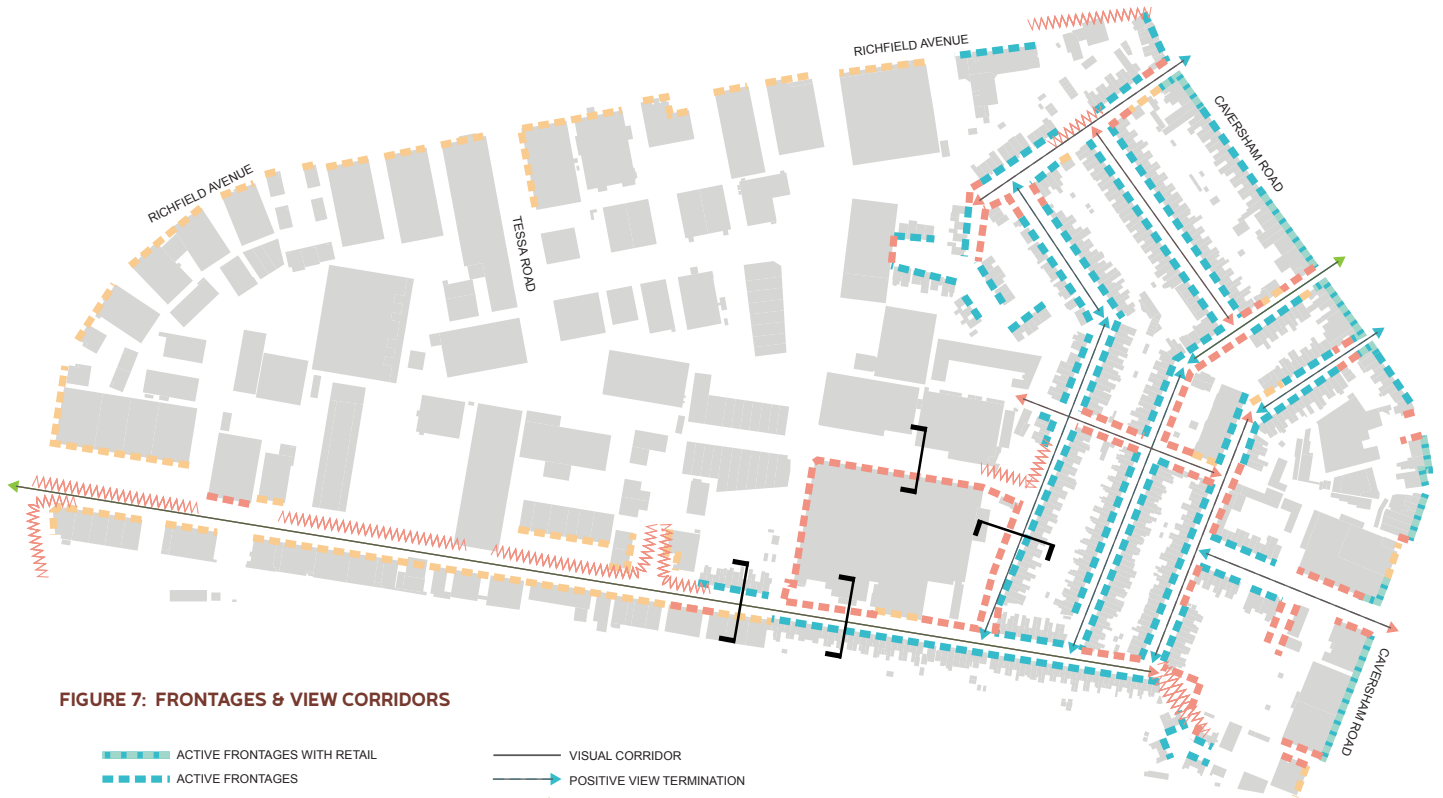


FIGURE 6: RESIDENTIAL BUILDINGS CHARACTER APPRAISAL



2.7 SUNLIGHT / DAYLIGHT / OVERSHADOWING

An assessment has been undertaken to consider the potential daylight / sunlight effects of the proposed development at Cox and Wyman, Cardiff Road, Reading.

The quality of the daylight and sunlight within the neighbouring properties has been assessed using the VSC, NSC and APSH assessments as recommended within the BRE document 'Site layout planning for daylight and sunlight' and the British Standards Document BS8206 part 2.

The results of the VSC and NSC assessments have shown that all windows / rooms within the surrounding properties would retain compliant daylight levels in line with the BRE criteria. The results of the APSH sunlight assessment also shows that all potentially relevant windows / rooms comply with the BRE guidelines.

In addition to the above, an assessment of the sunlight available to the gardens within the proposed scheme has also been assessed. The results show deviations from the suggested targets; however these effects are driven by the orientation of the standard row of terrace houses which form part of the scheme. As the proposed communal spaces retain sunlight levels in excess of the BRE targets, coupled with the consideration of the wider effects of the scheme, the results should be considered acceptable and in line with the overall intentions of the BRE criteria.

The proposed scheme is in line with the intentions of the BRE guidelines and relevant planning policy in terms of daylight and sunlight.

Please refer to the full 'Daylight and Sunlight' report accompanying the application for more information.

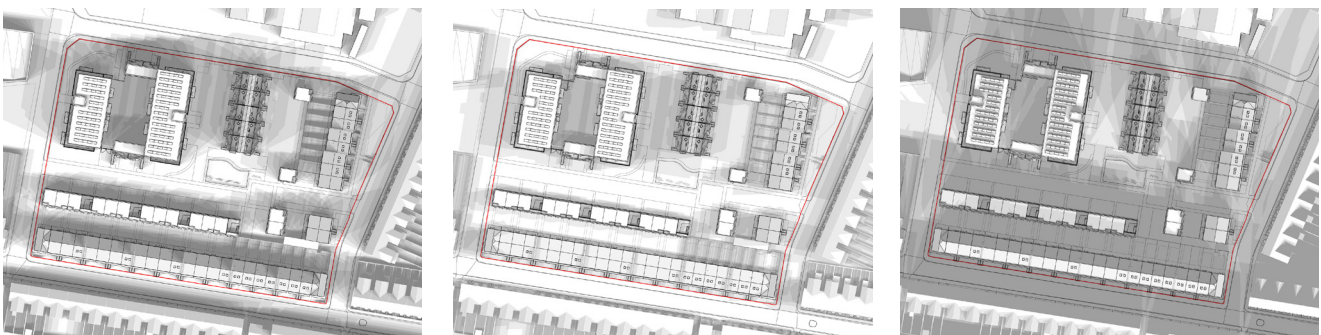
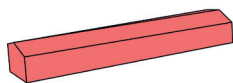


FIGURE 8: PROPOSED SOLAR STUDIES - SPRING EQUINOX, SUMMER SOLSTICE, WINTER SOLSTICE

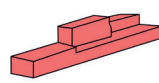


FIGURE 9: KEY BUILDING HEIGHTS



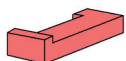
**QTR TRANSPORT
WAREHOUSE INDUSTRIAL**

Building height: 16m
No of Storeys: 3



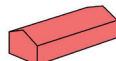
**FORMER READING POST BUILDING
INDUSTRIAL/COMMERCIAL**

Building height: 16m
No of Storeys: 4



**SYNTEGRA HOUSE
COMMERCIAL**

Building height: 12m
No of Storeys: 3



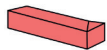
**MANROSE MANUFACTURING
UNIT INDUSTRIAL**

Building height: 10m
No of Storeys: 2



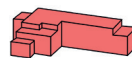
PREMIER INN HOTEL

Building height: 11m
No of Storeys: 3



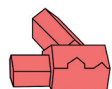
CAVERSHAM PLACE RESIDENTIAL

Building height: 12m
No of Storeys: 4



NEW HOPE RESIDENTIAL

Building height: 12m
No of Storeys: 3.5



EP COLLIER PRIMARY SCHOOL EDUCATION

Building height: 14m
No of Storeys: 2.5

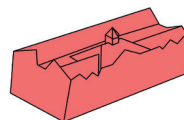




FIGURE 10: CONTEXT SECTIONS

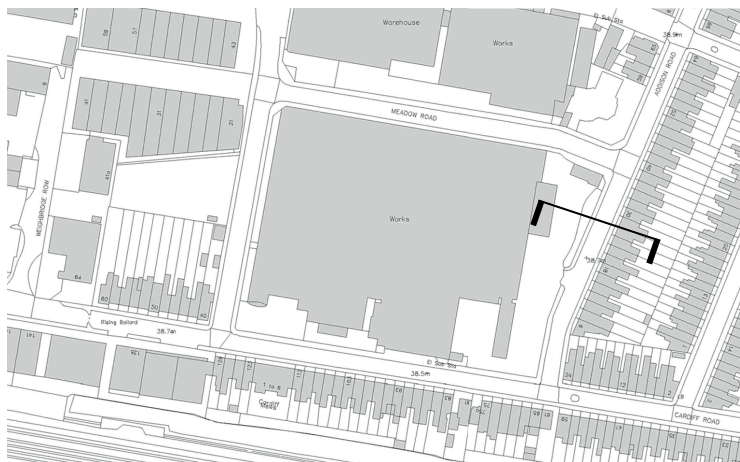
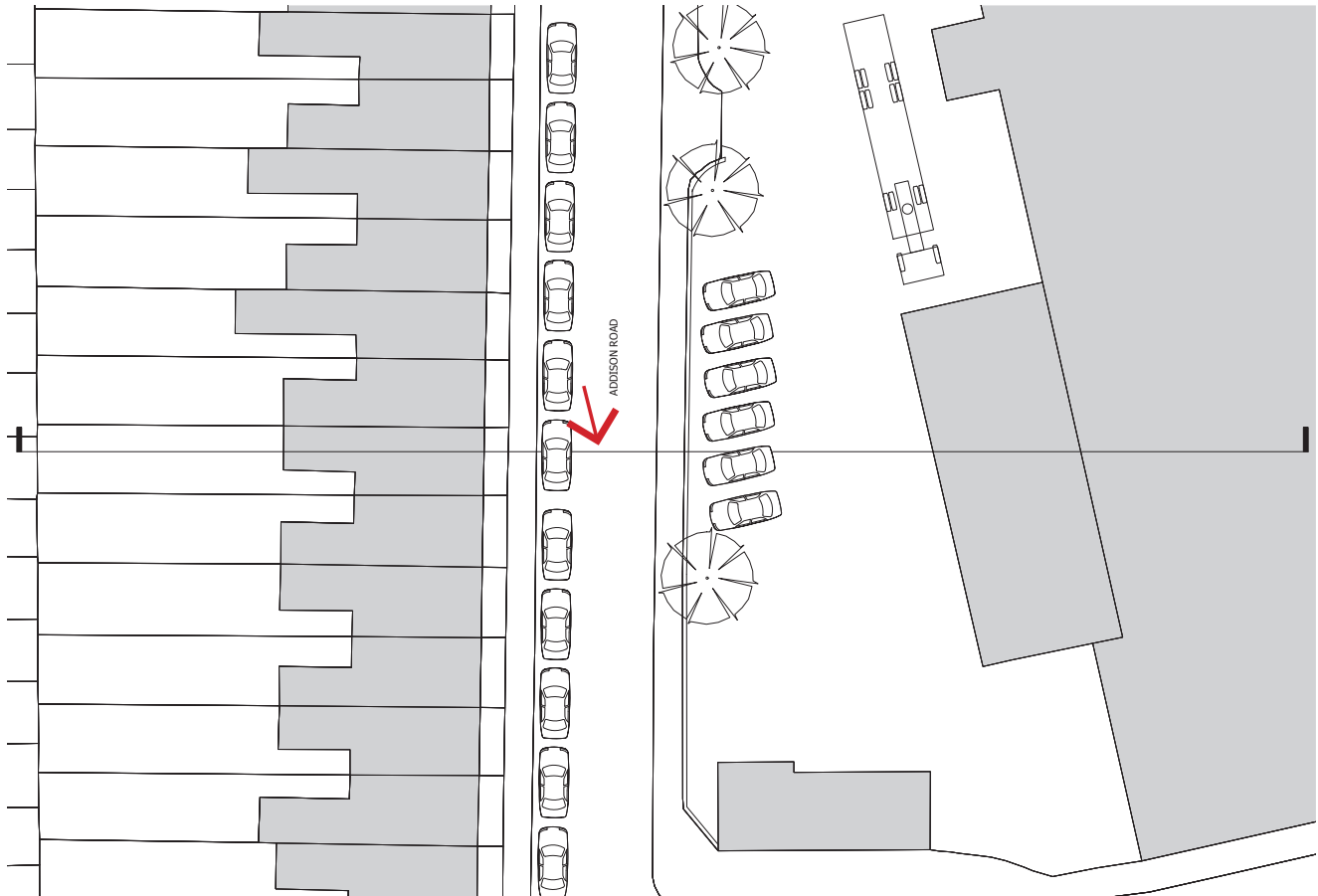
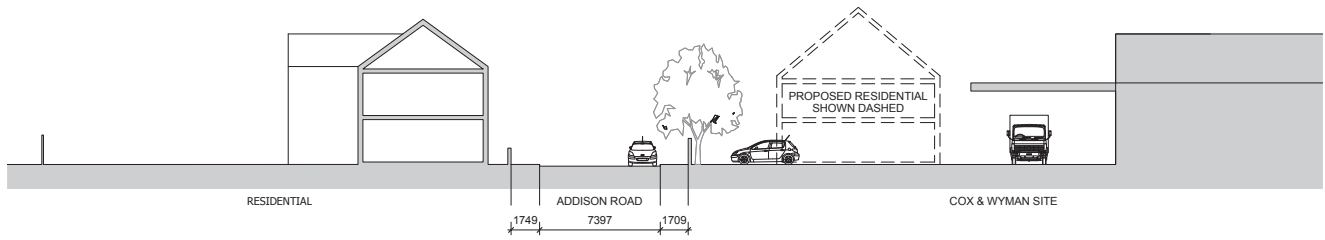




FIGURE 11: CONTEXT SECTIONS

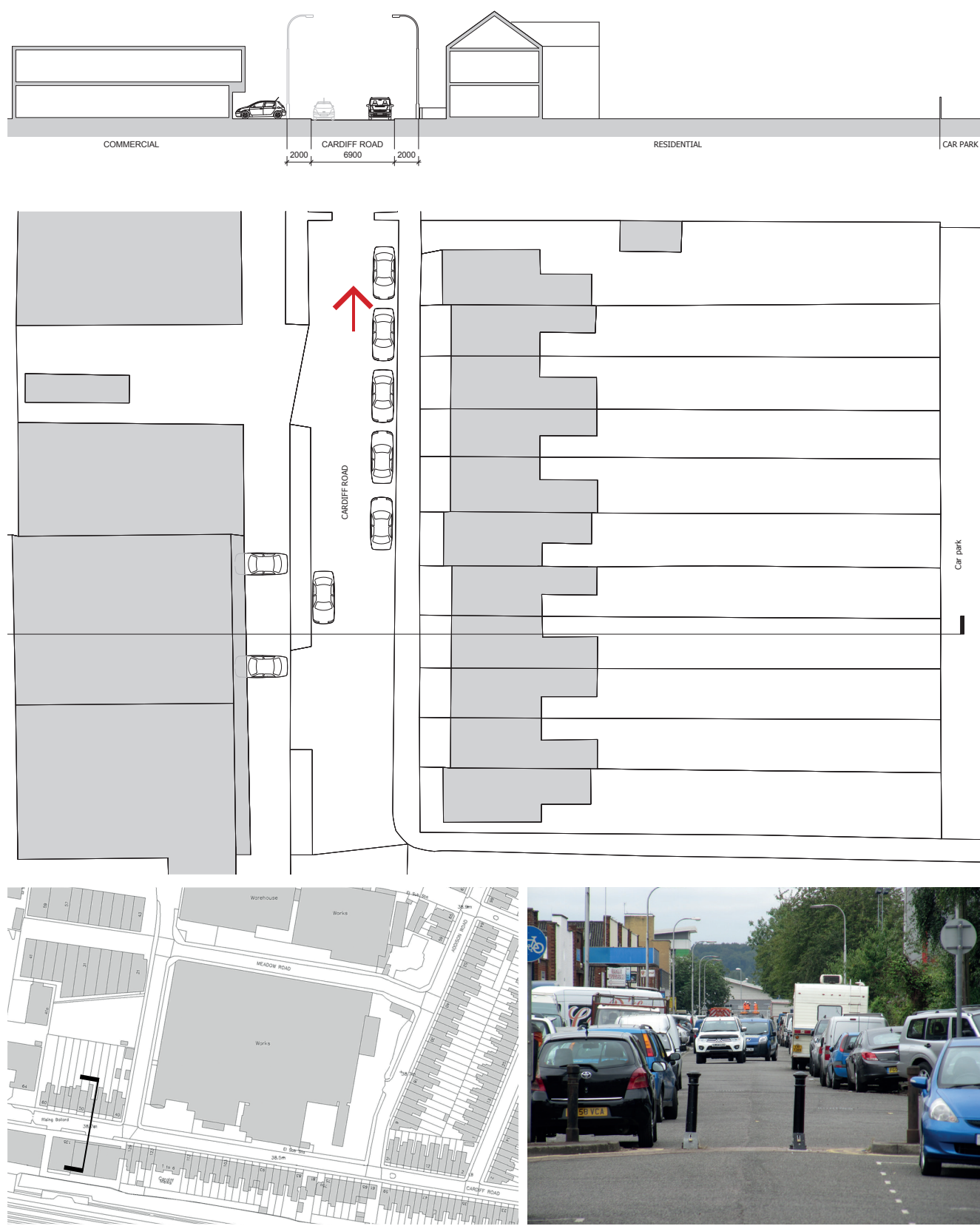




FIGURE 12: CONTEXT SECTIONS

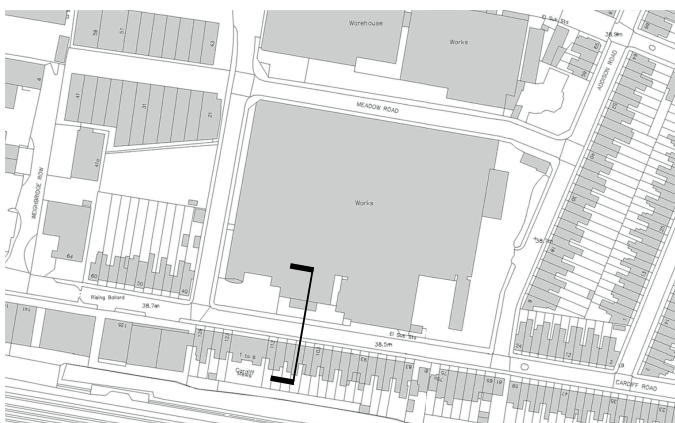
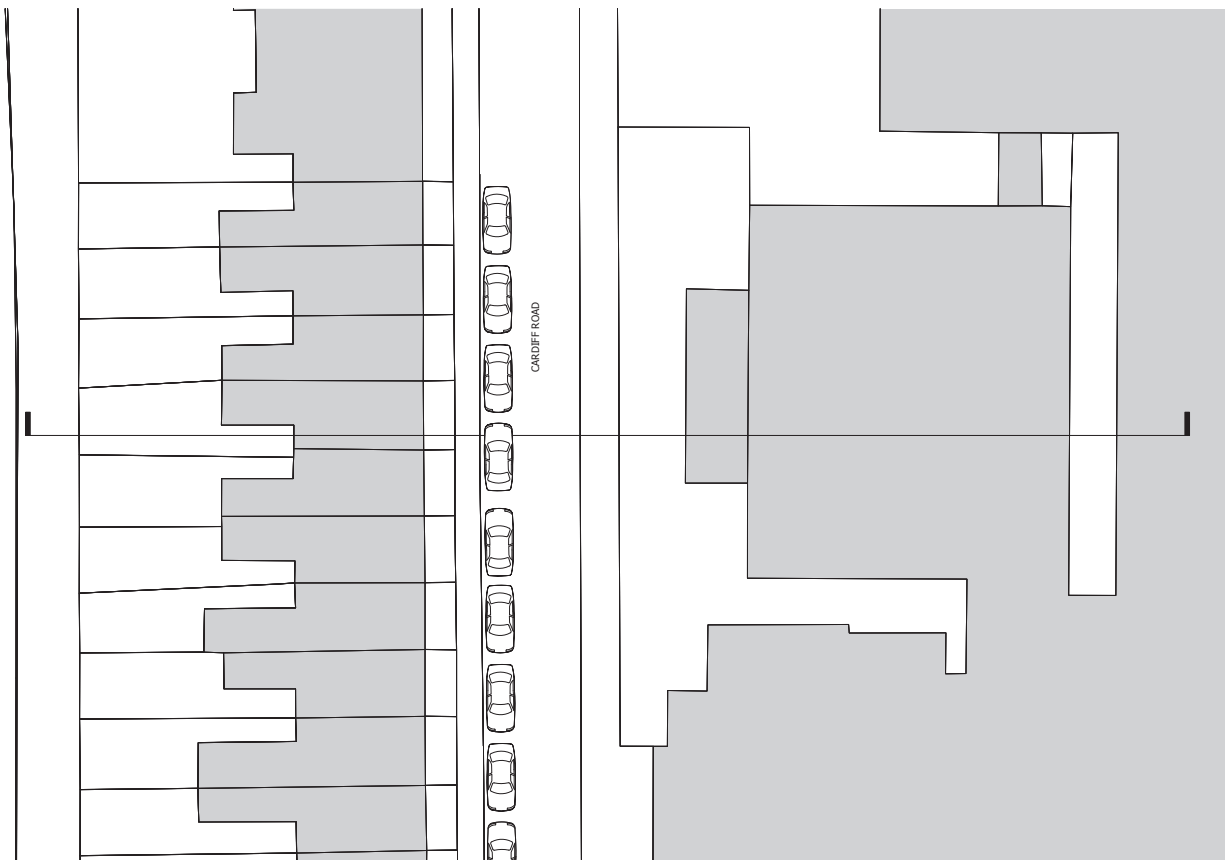
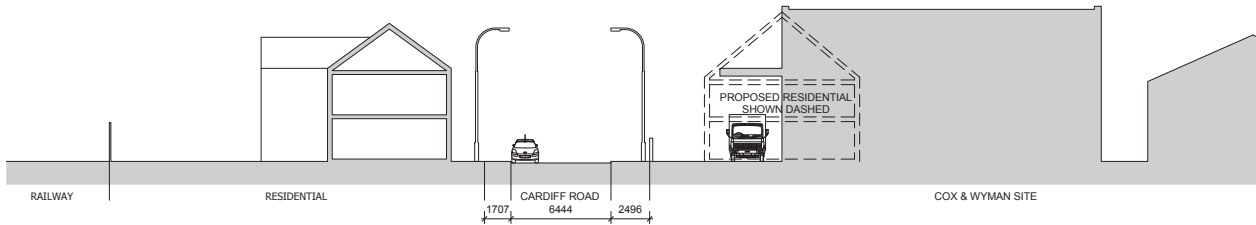
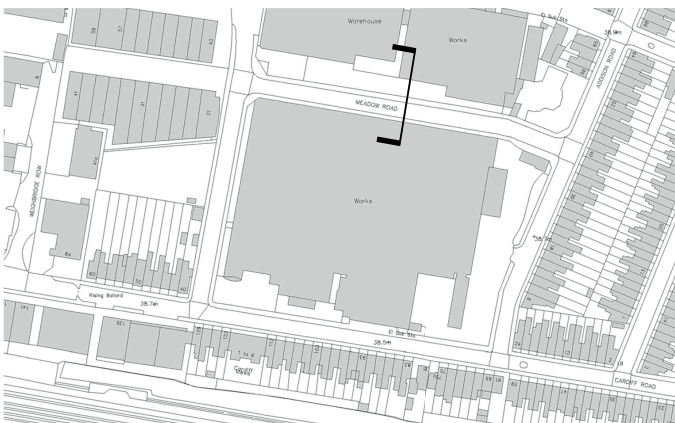
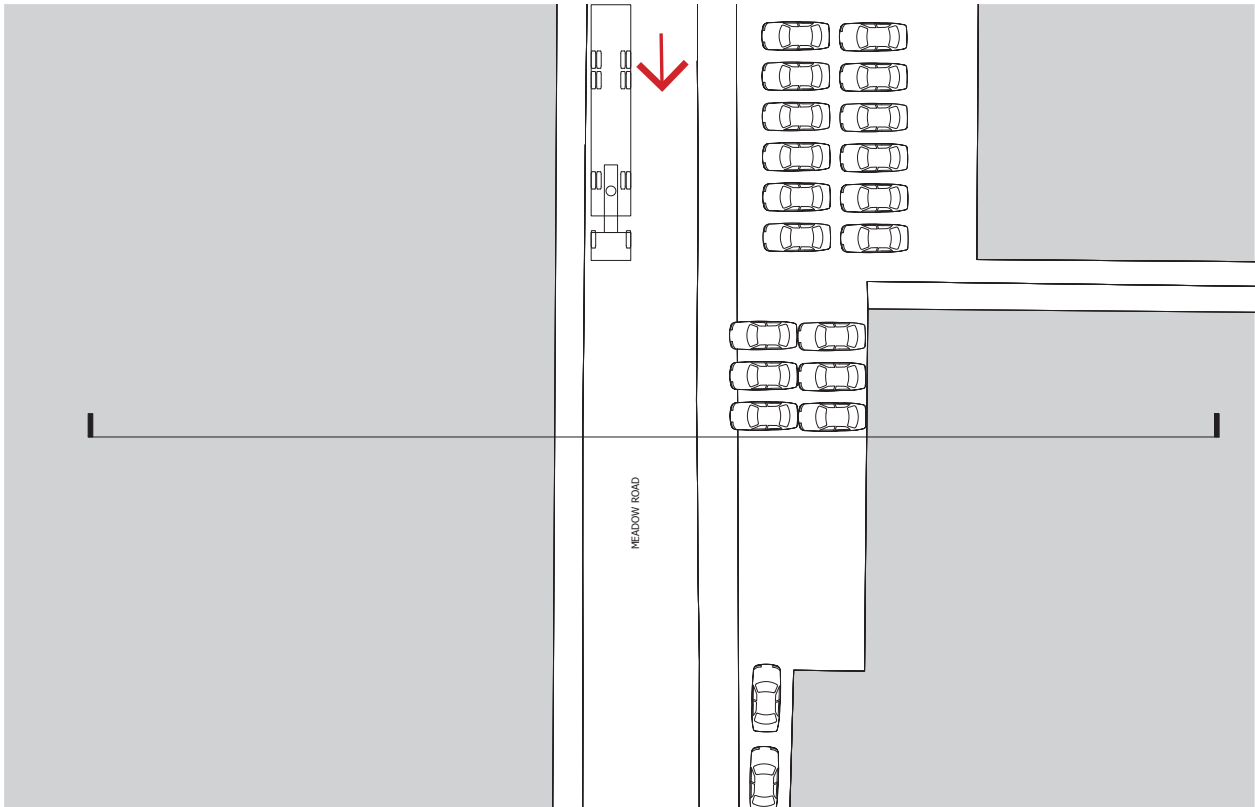
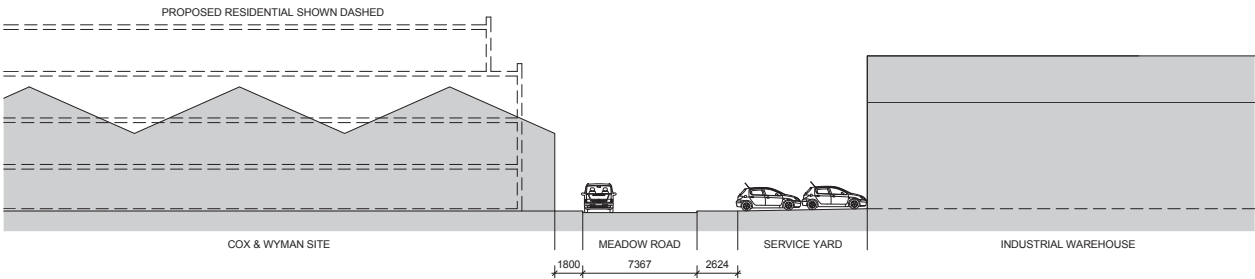




FIGURE 13: CONTEXT SECTIONS





2.8 ACCESS AND MOVEMENT

A Transport Statement has been prepared on behalf of the Applicant in support of a Planning Application.

Investigations have led to the following conclusions:

- The Site has a good level of accessibility to public transport;
- The Site has good pedestrian and cycle accessibility with local bus stops located within easy walking distance of the Site;
- It is proposed to provide 126 cycle parking spaces at the Site, which includes short stay cycle parking spaces for visitors and long stay spaces for residents, including spaces suitable for larger cycles;
- It is proposed to provide all of the car parking spaces within the Site (including the layby on Meadow Road which is allocated to the Cox and Wyman site.), which is considered adequate for the development proposals and is in accordance with Reading Borough Council's adopted standards;
- 5 car parking spaces will be provided with an electric charging point from first to encourage the uptake of electric vehicles;
- Adequate space will be provided within the site for motorcycle parking;
- Access is adequate in size to allow service vehicles to manoeuvre in/out of the Site in forward gear. The service area caters for a range of service vehicles up to the maximum size rigid vehicle 8 to 9m in length, which is considered adequate for the proposed development;
- The net increase in vehicular traffic associated with the proposals is shown to be negligible and would not have a significant impact on the local highway network



FIGURE 14: EXISTING VEHICULAR ROUTES



FIGURE 15: POTENTIAL FUTURE VEHICULAR ROUTES (SUBJECT TO RBC HIGHWAYS)



3.

PLANNING CONTEXT

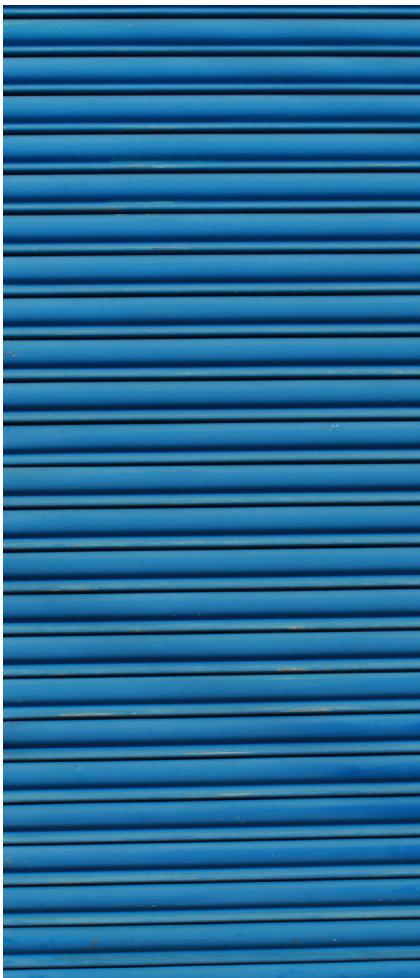


3.1 INTRODUCTION

This section reviews the existing planning policies allocated to the proposed site and its surrounding area. These have influenced the scheme design including use, unit sizes, amenity area, parking provision and the distance between the proposed building and neighbouring properties.

The planning policy context governing the proposed masterplan and design principles as described within this Design and Access Statement is set out both nationally in the National Planning Policy Framework (NPPF) (published March 2012) and at a local level within Reading Borough Council's Development Plan Documents.

A full analysis of this planning policy context is set out within the accompanying Planning Statement which should be read alongside this Statement. The key areas of planning policy relating to design and access and the site's designation are set out below.





3.2 NATIONAL PLANNING POLICY

The NPPF seeks to bring together all previous Government guidance into a single document replacing all previous planning policy statements; planning policy guidance; ministerial guidance and circulars. At its heart, the NPPF seeks to promote economic, environmental, and social wellbeing through sustainable development, are to be balanced and not treated in isolation (paragraph 7).

At paragraph 14 of the NPPF is the presumption in favour of sustainable development which should be seen as a golden thread running through plan-making and decision taking. Underpinning the delivery of sustainable development are the core planning principles (paragraph 17), the following being applicable to this application:

- Proactively drive and support sustainable economic development
- Seek high quality design and a good standard of amenity for all existing and future occupants of land and buildings;
- Support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change, and encourage the reuse of existing resources, and encourage the use of renewable resources;
- Encourage the effective use of land by reusing land that has been previously developed (brownfield land), provided that this is not of a high environmental value;
- Actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable;
- Take account of and support local strategies to improve health, social and cultural wellbeing for all, and deliver sufficient community and cultural facilities and services to meet local needs.

Paragraph 18 states that the Government is committed to securing economic growth in order to create jobs and prosperity, whilst paragraph 19 reinforces the Government's commitment to ensuring that the planning system does everything it can to support sustainable economic growth. Planning should operate to encourage and not act as an impediment to sustainable growth and as such, significant weight should be placed on the need to support economic growth through the planning system.

In terms of design, the Government attaches great importance to the design of the built environment. Good design is a key aspect of sustainable development, is invisible from good planning, and should contribute positively to making places better for people (paragraph 13).

The NPPF attaches great importance to the design of the built environment and considers that good design is a key aspect of sustainable development; is indivisible from good planning; and should contribute positively to making places better for people (paragraph 56). With this in mind, paragraph 58 requires new development to:

- Function well and add to the overall quality of an area over the lifetime of a development;
- Establish a strong sense of place by creating places which are attractive to live, work and visit;
- Create and sustain an appropriate mix of uses;
- Respond to local character and history, reflecting the local identity of surroundings and materials whilst not preventing or discouraging innovation;
- Create safe and accessible environments; and
- Be visually attractive through *"good architecture and appropriate landscaping"*.

Paragraph 64 further highlights the importance of good design, giving Local Planning Authorities power to refuse poorly designed schemes which fail to take the opportunities available for improving the character and quality of an area and the way in which it functions. The need to work closely with the local community, i.e. *"...those directly affected by their proposals"* is encouraged in order to *"...evolve designs that take account of the views of the community"* (para. 66).



3.3 LOCAL PLANNING POLICY

The relevant local plan policies that have informed the proposals are set out below.

Reading Borough Local Development Framework Core Strategy Document (2008, altered 2015)

Policy CS1 (Sustainable Construction and Design) requires design proposals for new buildings to use energy, water, minerals, materials and other natural resources appropriately and take account of the effects of climate change.

Policy CS2 (Waste Minimisation) requires development to incorporate measures to minimise the generation of waste and promote sustainable alternatives to waste management.

Policy CS7 (Design and the Public Realm) requires that all development must be of high design quality that maintains and enhances the character and appearance of the area of Reading in which it is located.

Policy CS11 (Use of Employment Land for Alternative Uses) states that within the Core Employment Areas, the overall level of employment land should be maintained. Proposals that result in the loss of such land will not be permitted.

Policy CS15 (Location, Accessibility, Density and Housing Mix) requires developments to provide an appropriate range of housing types, sizes and tenures, in accordance with the findings of the Housing market assessment. Net densities of below 30 dwellings per hectare will not be acceptable.

Policy CS16 (Affordable Housing) required developments of 15 dwellings and above to provide 30% of the total number of dwellings as affordable housing.

Policy CS29 (Provision of Open Space) requires new provision on residential sites of 50 dwellings or more. The provision of Children's Play Areas and Neighbourhood Recreation Areas should be made to ensure satisfactory levels of provision in the local area.

Sites and Detailed Policies (2012, altered 2015)

Policy DM5 (Housing Mix) requires that outside the central area, over 50% of dwellings will be 3 bedroom or more on sites of 10 or more dwellings.

Policy DM10 (Private and Communal Space) requires that dwellings are provided with functional private or communal space. For flats, either communal outdoor space, balconies or roof gardens or roof gardens will be acceptable.

Policy SA12 (Core Employment Area) confirms the designation of the Richfield Avenue Core Employment Area (ref SA12g). The corresponding proposals map illustrates the extent of SA12g which includes the former Cox & Wyman site.



Emerging Draft Reading Borough Local Plan 2036

Reading Borough Council is in the process of preparing a new Local Plan to guide development within the borough to 2036. The latest version of the draft plan (Regulation 18 document) was consulted on in May 2017; the next consultation (Regulation 19 document) is expected in November 2017.

Draft Policy EM2 and the draft Local Plan Proposals Map proposes a revised boundary to the Richfield Avenue Core Employment Area which removes the former Cox & Wyman site from the area designated for employment use.

Draft Policy WR3 then proposes to allocated the former Cox & Wyman site for residential development, with some scope for commercial use on the western edge. The policy states that development should:

- Take account of access restrictions on surrounding streets and ensure that residential access is generally separated from accesses to commercial areas;
- Include all parking requirements within the site to avoid exacerbating parking issues on existing streets;
- Ensure appropriate separation or buffers between residential and industrial areas, to improve the relationship between the two uses in the local area;
- Avoid adverse effects on important trees including those protected by TPO along Addison Road;
- Address air quality impacts on residential use;
- Address noise impacts on residential use;
- Address any contamination on site;
- Address flood risk issues arising from a Flood Risk Assessment; and
- Ensure that development has no adverse effect on water quality.





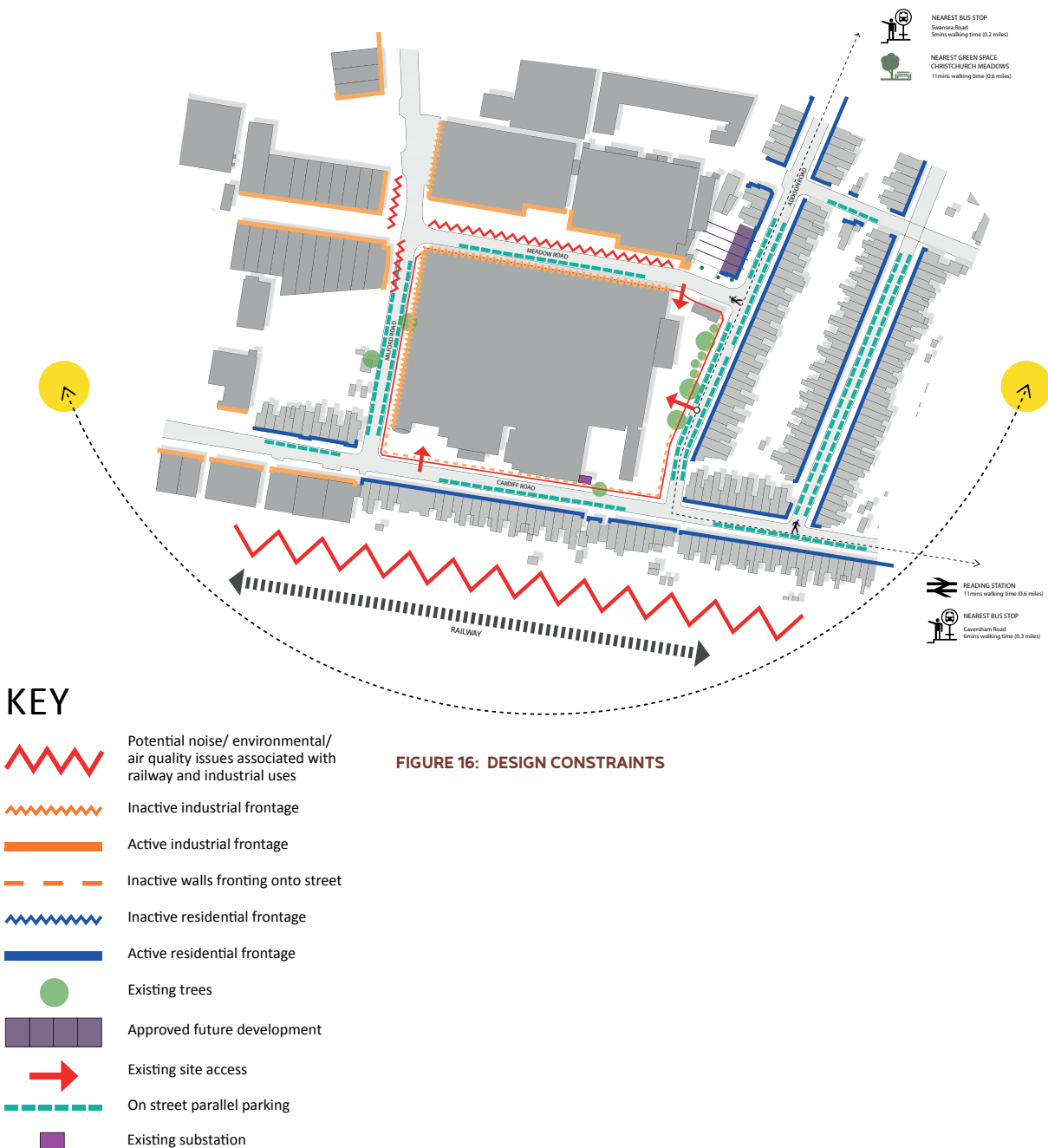
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DESIGN PROCESS & CONSULTATION



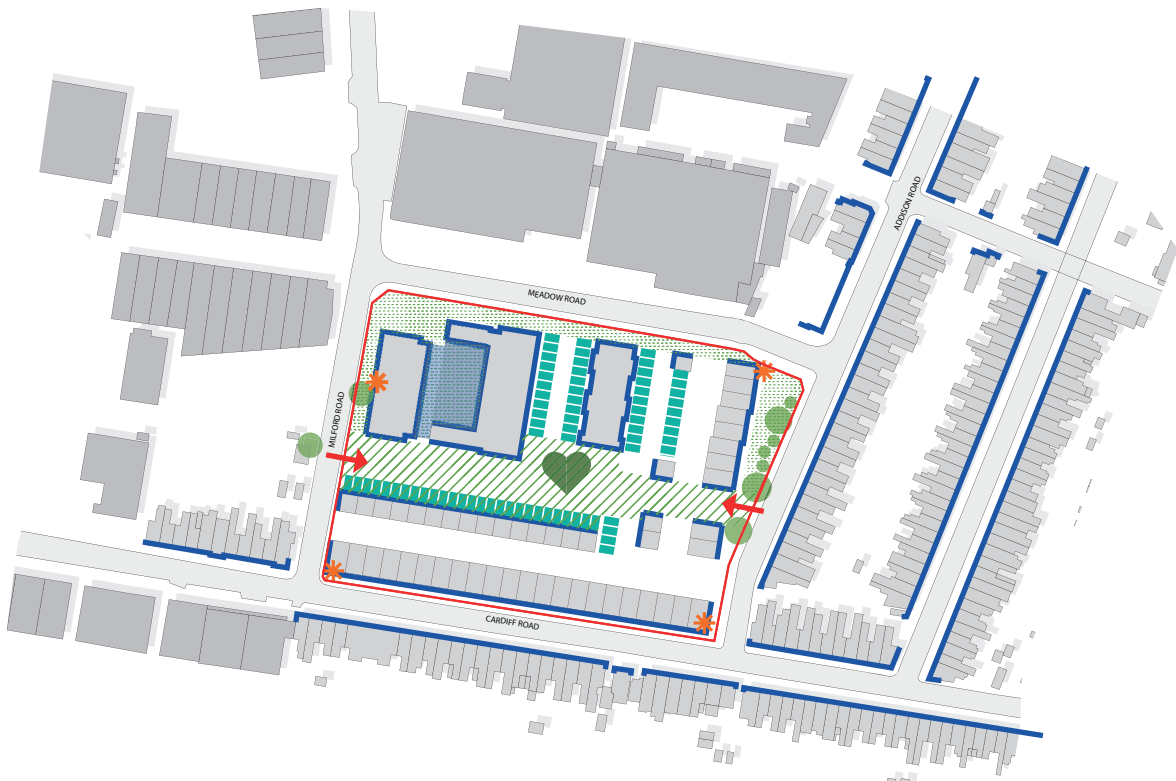
4.1 INTRODUCTION

The site presents a number of existing constraints that must be considered and addressed and several unique opportunities which can be utilised within the design. From this analysis a design strategy is adopted and a design response prepared.





4.2 DESIGN OPPORTUNITIES AND CONSTRAINTS



KEY

-  Active residential frontage
-  Existing trees
-  Approved future development
-  Proposed site access
-  On site parking provision
-  Green mews
-  Landscaped buffer
-  Landscaped deck over parking at ground floor level
-  Green space including local area for play (LAP)
-  Marker building

FIGURE 17: DESIGN OPPORTUNITIES



4.3 DESIGN OBJECTIVES

Clarify the boundary between residential and employment uses

Clarify and separate the street serving the different uses

Create active frontages facing onto Cardiff Road and Addison Road residential streets

Create improved active frontages facing onto the residential parts of Milford Road and Meadow Road

Provide a Local Area for Play to serve the wider family housing in the area at the heart of the scheme

Create a high quality residential area with enhanced green spaces and street trees in an otherwise hard built up area

Propose built form that enhances the quality of the site's adjoining built context, dovetailing with that context and creating a green buffer to the employment area to create a legible neighbourhood and environment

Provide high quality family and affordable housing in a sustainable location with excellent accessibility to Reading Town Centre and the Train Station

Respect the natural environment by retaining trees where possible and re-provide any trees lost by introducing significantly more, good quality, new trees



4.4 DESIGN DEVELOPMENT & CONSULTATION SUMMARY

This section describes the process that has helped inform the design of the proposals.

The application is the result of nearly two years of design exploration and development. The team have actively engaged with Reading Borough Council pre-planning process and to date have had multiple pre-application meetings, the first of which occurred on the 15th of April 2015.

Following from this meeting, formal pre-application advice was received from RBC on 16th April 2015 which culminated in revisions to the scheme and the development of the design through the following three pre-app meetings.

These are represented in the following pages as Pre-app schemes 01, 02 and 03. In addition, design development of the scheme took place between these formal meetings.

The first of these further pre-application submissions was made to RBC in April 2016.





4.5 PRE-APP SCHEME 2015

62145/PREAPP Cox & Wyman Comments Tracker	
LOCATION: Cox & Wyman Ltd, Cardiff Road, Reading	
PROPOSAL: Pre-application advice for redevelopment of former Cox & Wyman site to provide residential units	
Land Use Matters	
PREVIOUSLY CONSIDERED SCHEME (Meeting held: 22/11/16)	REVISED SCHEME (Dated: 14/02/17)
1 There is no objection to the loss of the existing building on site as it is acknowledged that due to the bespoke design refurbishment for industrial or office use is not viable. It is also acknowledged that there are constraints to some forms of replacement employment use due to the proximity of the site to existing residential properties.	
2 In relation to the impact on the residential environment it is considered that an element of B1 Business use defined as 'Offices (other than those that fall within A2), research and development of products and processes, light industry appropriate in a residential area' should be incorporated. Therefore further robust information has not been submitted to seek to justify a solely residential scheme.	Proposals don't include any 'Offices (other than those that fall within A2), research and development of products and processes, light industry appropriate in a residential area'
3 It is acknowledged that there are site specific benefits to the consideration of the Cox and Wyman site for non-employment use which are not replicated by other sites in the Richfield Avenue CEA. The submitted Masterplan should therefore refer to employment use only on the other sites within the CEA; and development within the Cox and Wyman site should be designed to safeguard any proposed residential units from adjacent commercial uses and not constrain continued employment use within the remainder of the CEA.	Noted - Application is only for Cox & Wyman site
Design, Layout and Residential Amenity	
PREVIOUSLY CONSIDERED SCHEME (Meeting held: 22/11/16)	REVISED SCHEME (Dated: 14/02/17)
4 The proposed scheme has a density of 85.5/ha (112 Units) which exceeds upper limit for an 'urban area' set out in Policy CS25. The proposed scheme is not in keeping with the prevailing character of the surrounding residential dwellings and the submitted layout is not considered to be acceptable in design terms.	The proposed scheme is for 96 units. This is within the appropriate density for an Urban site as stated in Policy CS15 at 40-75 dwellings per hectare. For this site at 1.31ha, this represents a range between 52 and 98 dwellings.
5 The dwelling mix as set out in the accommodation schedule does accord with Policy DMS	There are 50no. three bedroom units provided in the proposed scheme for 96no. units. Of the total number of units 48 are in the form of houses, this represents 50% of the scheme
6 There are a number of existing trees along the Eastern boundary of the site to Addison Road that are protected by TPO 21/14. TPO trees are shown to be removed on the site plan to accommodate the proposed development. Tree 13, 14 and 19 (Birch and Limes) are mature trees; the remainder of the protected trees are a differing upright species. At this time officers seek the retention of these trees, which would require the proposed 3 bed units to be set back from the road frontage.	The proposals retain the mature trees, in particular T3, 14 & 19. The proposals also retain the trees along the Addison Road boundary, T5 - 10. These trees will be supplemented with additional street trees as part of our landscape proposals.
7 Within the site the scheme lacks an essential buffer to the existing adjacent commercial units on Milford Road and Meadow Road either in the form of small scale commercial units or significant green space.	The proposed units facing onto Milford Road and Meadow Road have been moved away from the boundary by approximately six metres to provide a green buffer. This is to be formed by a low level wall with railings on the boundary with hedging and trees planted behind. Additionally, a larger green space has been formed on the junction between Milford Road and Meadow Road to increase separation of uses.
8 The proposal also fails to take the opportunity to create active frontages within the site adjacent to the proposed access road which fails to create a sense of place within the site contrary to Policy CS7 Design and the Public Realm.	The proposed house types and apartment elevations on the internal site road provide an active frontage, with good levels of natural surveillance over all public spaces.
9 Policy CS29 also requires new provision of open space for residential sites of 50 or more units. This provision is required to be provided within the application site.	There are opportunities for incidental play in the green spaces on site. Open spaces allowed for recreation on site and is in close proximity to park space adjacent to river.
The proposed site layout is formed of three blocks of development with a new central access road running east to west linking Addison Road and Milford Road; these are considered below:	
Cardiff Road frontage block:	
PREVIOUSLY CONSIDERED SCHEME (Meeting held: 22/11/16)	REVISED SCHEME (Dated: 14/02/17)
10 The proposed Cardiff Road frontage would consist of a terrace of 'traditional' 3 bed, two storey dwellings with pitched roofs comparable to the height of the existing commercial unit.	Scale of terraced dwellings maintained at two storeys to relate to the adjacent residential context
11 The proposed Cardiff Road frontage would consist of a terrace of 'traditional' 3 bed, two storey dwellings with pitched roofs comparable to the height of the existing commercial unit. Subject to appropriate rear garden depths (minimum of 10 m) and acceptable materials these units are acceptable in principle.	All gardens throughout the scheme are minimum ten metres.
12 Directly to the rear of these terraced dwellings are parking areas which are interspersed with 2 storey structures containing 2 bed units. These units do not achieve the required back-to-back separation distance of 20 metres sought by policy DM4, as ground level amenity space is not provided. This results in an unacceptable relationship in terms of overbearing and privacy impacts on both types of dwelling and the 2 bed units are therefore not acceptable at this location.	These units have been omitted and replaced with garages to the rear of terraced dwellings fronting Cardiff Road. These are much reduced in scale and provide additional accommodation for terraced dwelling, this is envisaged to provide opportunities for home offices.
13 On the junction of Cardiff Road and Addison Road the form of development alters to 3 bed single aspect dwellings orientated towards Addison Road and a parking court within the site. This layout creates a gap in the street scene which is not considered to have a positive impact on the character of the area. The siting of units set back from the site frontage and 'hard up' against the flank elevation of the proposed end of terrace dwelling is considered to have a detrimental overbearing impact on the rear of the terrace dwelling and is not an acceptable relationship.	Existing substation to be relocated to allow the terrace fronting Cardiff Road to continue for the full length of the site frontage to remove the gap in the street scene.
14 Policy DM 10 'Private and Communal Outdoor Space' states that houses be provided with useable private outdoor amenity space no less than the floor area of the dwellings to which it relates. The proposed 3 bed units do not have garden areas but incorporate balcony elements; this is not characteristic of the area and is not considered to be sufficient or appropriate in this location.	There are 12 houses which are provided with private outdoor space at each level of the dwelling. The private amenity space provided is equal to the footprint of the dwelling. The design of these houses has been carefully developed to provide an environment suitable for contemporary urban living.
Addison Road / Meadow Road Block	
PREVIOUSLY CONSIDERED SCHEME (Meeting held: 22/11/16)	REVISED SCHEME (Dated: 14/02/17)
15 The building layout in this area forms a courtyard containing a mix of dwelling heights and styles. The two storey terraced dwellings oriented toward Addison Road are considered to be acceptable in design terms and would create interest in the street scene but are considered to be sited too close to protected trees.	The two storey terraced dwellings have been set back from the road in order to protect the significant trees, T3, T4 & T9. This allows the creation of an enhanced landscaped area on Addison Road
16 Running parallel to the rear boundary of the site with Meadow Road there is a row of proposed garages that due to their proximity to the nearest 3 bed dwellings are considered to have an unacceptable harmful overbearing impact.	Proposed garages removed to remove overbearing impact. Parking within framed courtyard space.
17 The boundary treatment and built form orientated towards the internal access road is considered to fail to create an active street scene and sense of place with the site.	Buildings facing onto internal road present an active street scene, providing natural surveillance and occupation to the street.
Meadow Road/ Milford Road Block	
PREVIOUSLY CONSIDERED SCHEME (Meeting held: 22/11/16)	REVISED SCHEME (Dated: 14/02/17)
18 The built form in this area of the site is proposed to be 4 storey in height and consisting of flatted units. These blocks would exceed the roof height of the existing buildings within the site and surrounding industrial warehousing.	The proposed apartment block is three full storeys with a set back fourth storey to articulate the form. The apartment block on the corner of Meadow Road/ Milford Road acts as a marker building to create separation between the industrial and residential uses. There is precedent in the local area for buildings of similar height to this block in both the industrial and residential context.
19 Flatted development is not characteristic of the area, this quantum of development is not acceptable directly adjacent to the boundary with employment uses to be retained	We have reduced the size of the apartment block and moved it away from the boundary in order to create a landscaped buffer between uses. The majority of the site area is to be developed as family housing.
20 It is considered that the site in keeping with the character of the wider area should replicate the existing residential grid pattern and provision of amenity space.	We have split the site into a selection of blocks which reflect the character of the surrounding area whilst integrating parking and public amenity provision. It is considered that the corner of Meadow/Milford Road requires a different approach to address the adjacent employment use and creating defined edge to residential use.
21 Notwithstanding the above the principle of podium level amenity space could be considered to be acceptable subject to meeting the space standards set out in policy DM10.	The apartment block is provided with both ground level and podium level private and shared amenity space.
Highways/Parking	
PREVIOUSLY CONSIDERED SCHEME (Meeting held: 22/11/16)	REVISED SCHEME (Dated: 14/02/17)
22 Access to the site is to be provided from the eastern and western boundaries creating a route through the site, this has been deemed acceptable. The road would appear to be 6m in width, given parking reverses onto it, and this is sufficient to accommodate the passing of vehicles.	It is proposed that the existing site access at the eastern boundary will be maintained in order to maintain the existing trees. With a new access point to the west. The road will be 6m where vehicles will reverse onto it.
23 The proposals have been discussed with the Council's Network Manager and who has indicated that if a divide were implemented that the width restrictions could be removed as they would no longer be required.	The scheme layout is designed to allow a divide to be implemented between uses.
24 Trip rate information will be required but it is envisaged that the proposal will reduce trips in the area. If this is the case then no junction assessments would be required as the development would be an improvement.	Noted
25 Car parking should be in accordance with the Councils adopted policy to ensure overspill does not occur onto the local road network.	Adopted parking standards suggest a maximum of 147 spaces for Zone 2. Given the proximity of the site to Reading central area and the rail station, 105 spaces are provided as part of the proposed scheme.
26 Loading bays are located on Meadow Road that were provided for Cox and Wyman and therefore the applicant should review these bays in an attempt to increase limited waiting bays in the area that could be utilised by visitors to the development. If this is undertaken no visitor parking would be required on site.	Noted
Other site constraints	
PREVIOUSLY CONSIDERED SCHEME (Meeting held: 22/11/16)	REVISED SCHEME (Dated: 14/02/17)
27 Flooding - Areas of the site are in Flood Zone 2; you are advised to enter into separate formal pre-application discussions with the Environment Agency, keeping the local planning authority up to date with any such discussions.	Noted
28 The site is within an area for potential contaminated land.	Noted
29 The site is within an air quality management area.	Noted.
30 A particular issue to the south of the site is noise, from both nearby mainline trains and the associated train depot close to the site.	Noted
31 Affordable Housing - Policy CS16 sets out a 30% on-site requirement. The accommodation schedule proposes 34 affordable units which equates to 30%. This is considered acceptable subject to the mix of units offered (to include 3 bed houses and tenure). Officers would expect detailed pre-application discussions prior to any formal submission.	Noted





4.6 PRE-APP NO.1 – APRIL 2016

The scheme presented proposed an ambitious residential development over the site, with terraced houses fronting onto Cardiff Road with FOG units to the rear, townhouses at the corner of Cardiff Road and Addison Road, and two apartment blocks to the north of the site with parking provided below a landscaped podium deck to each block as a part basement.

These apartment blocks ranged in height from four to six storeys, gradually increasing in height towards the Norwest corner of the site overlooking the remainder of the industrial estate.

This scheme provided a total of 235 units with 260 car parking spaces on site. 200 of these units were apartments.



FIGURE 18: SEMI-BASEMENT LEVEL PLAN

OPTION 01 – 6 storey max

Type 01 – Townhouses 15 Units

Type 02 – FOG 6 Units

Type 03 – Mini Townhouses 8 Units

Type 04 – Block Townhouses 12 Units

Type 05 – 1 Bed Apartments 130 Units

Type 06 – 2 Bed Apartments 60 Units

Type 07 – 3 Bed Apartments 4 Units

TOTAL
235 Units

Parking Numbers (Estimated maximum)

Semi Basement

Block A 85

Block B 85

Surface 72

FOG 18

TOTAL 260

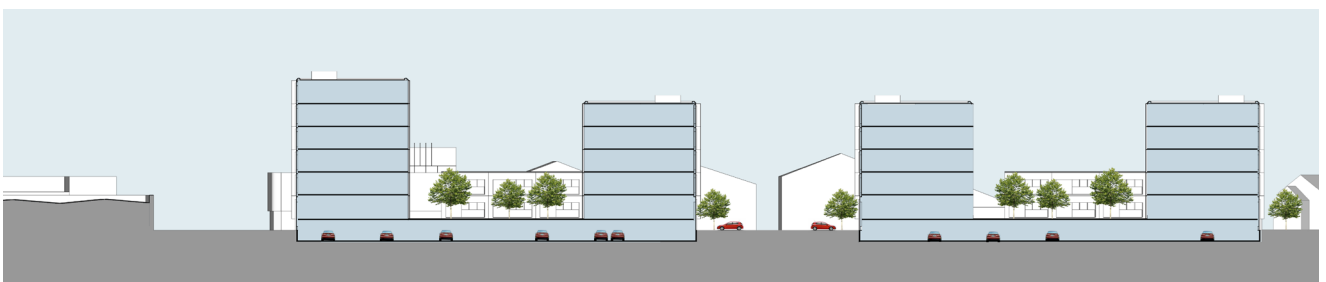
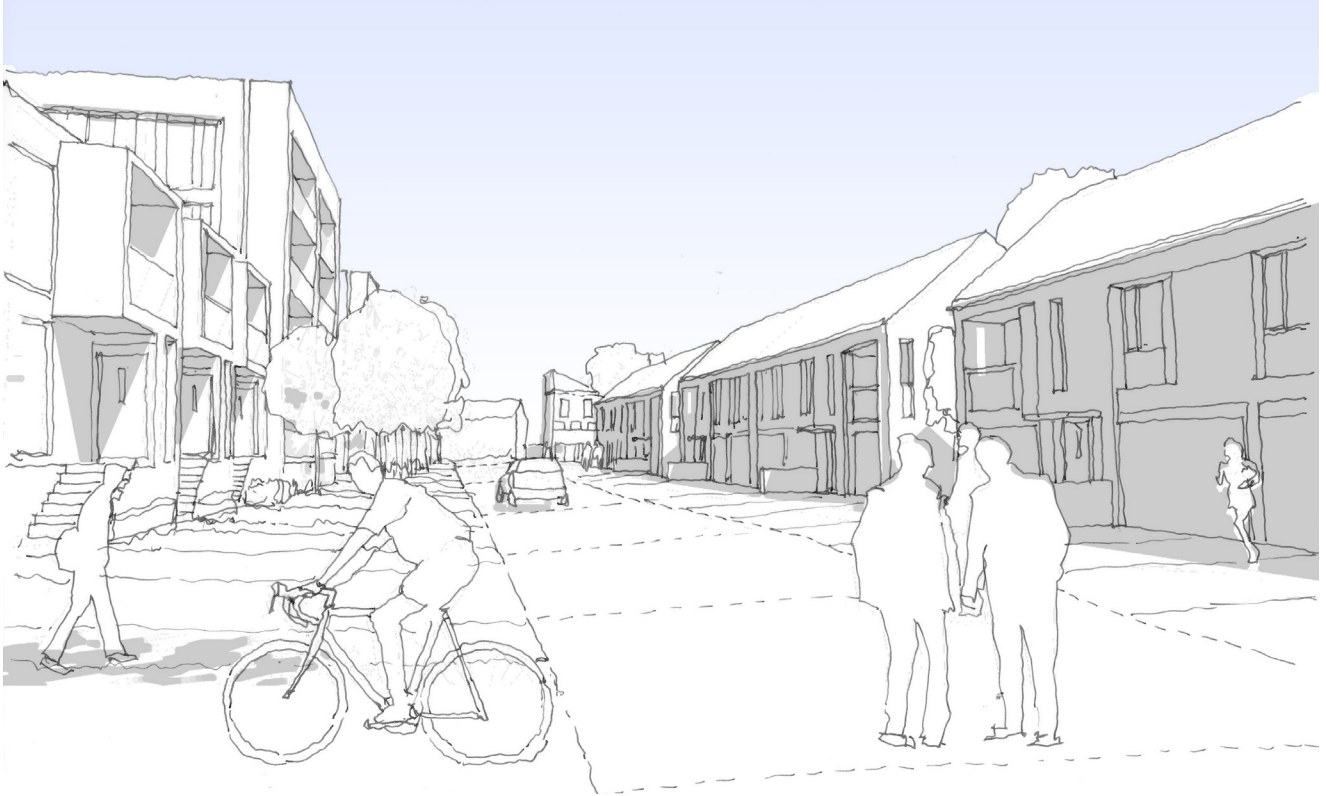


Cycle Parking

TBC









4.7 PRE-APP NO.2 – NOVEMBER 2016

Following on from pre-app No.1, we received detailed feedback from RBC which lead to a significant redesign of the proposals. As a result, a revised scheme that significantly reduced the amount of accommodation was proposed. In this scheme, the second block of apartments to the northeast of the site was replaced by a combination of terraced houses which face onto Addison road and a row of double backed townhouses with a central green space at the heart of the scheme.





FIGURE 19: SITE PLAN







Houses

Type	1B	2B	3B	Total
Type A	0	0	21	21
Type B	0	0	18	18
Type C	0	9	0	9
Type D	0	0	10	10
Total	0	9	49	58

Apartment Block

Floor	1B	2B	3B	Total
GF	0	4	4	8
1F	4	8	4	16
2F	4	8	4	16
3F	6	6	2	14
Total	14	26	14	54

TOTAL UNITS	14	35	63	112
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Split of Units

	No of units	Percentage of Total
1 bed	14	13%
2 bed	35	31%
3 bed	63	56%
Total Number of units	112	100%

Percentage affordable	30%
No. of units affordable	34

Parking Provision	Maximum parking standards		Number of units in scheme	Maximum parking in scheme	
	Zone 1*	Zone 2		Zone 1*	Zone 2
Flat 1-2 bed	0.5	1	40	20	40
Flat 3 bed	1	1.5	14	14	21
House 1 bed	0.5	1	0	0	0
House 2 bed	1	1	9	9	9
House 3 bed	1	2	49	49	98
Visitor Parking (flats)	0	0.1	54	0	5.4
TOTALS			112	92	173.4

*Site is in Zone 2, Zone 1 shown for reference only

DM5: HOUSING MIX

On new developments for 10 or more dwellings outside the central area and defined district and local centres, planning decisions will ensure that over 50% of dwellings will be of 3 bedrooms or more, and the majority of dwellings will be in the form of houses rather than flats, having regard to all other material considerations.

The site is located outside of the designated Reading Central Area and any defined district and local centre. Policy DM5 outlines that in such areas "planning decisions will ensure that over 50% of dwellings will be of 3 bedrooms or more, and the majority of dwellings will be in the form of houses rather than flats"



4.8 PRE-APP NO.3

Following on from pre-app meeting 02, we received detailed feedback from RBC. This is shown in a colour coded format in order to track our design development against these requirements. The significant scheme redesign presented in Pre-app No.02 was followed by a refined series of design changes that further addressed issues raised in the feedback.

This included the removal and relocation on site of the electrical substation which faces onto Cardiff Road so that the row of terraced houses can run the full length of this frontage. This led to the replacement of the block of townhouses on the corner of Cardiff Road and Addison Road with terraced houses, and the setting back of the smaller terrace along Addison Road to maintain a more significant green edge to the site along this frontage. This also allows more significant space around the TPO trees protecting their root areas.









KEY

- 1 Bed Unit
- 2 Bed Unit
- 3 Bed Unit
- Garage/Home office
- Garage

Houses

Type	1B	2B	3B	Total
Type A	0	6	26	32
Type B	0	0	12	12
Type C	0	0	4	4
Total	0	6	42	48

Apartment Block

Floor	1B	2B	3B	Total
GF	3	2	3	8
1F	7	5	2	14
2F	5	7	2	14
3F	3	8	1	12
Total	18	22	8	48
TOTAL UNITS	18	28	50	96

Split of Units

	No of units	Percentage of Total
1 bed	18	19%
2 bed	28	29%
3 bed	50	52%
Total Number of units	96	100%

Percentage affordable	30%
No. of units affordable	29

	Maximum parking standards		Number of units in scheme	Maximum parking in scheme	
Parking Provision	Zone 1*	Zone 2		Zone 1*	Zone 2
Flat 1-2 bed	0.5	1	40	20	40
Flat 3 bed	1	1.5	8	8	12
House 1 bed	0.5	1	0	0	0
House 2 bed	1	1	6	6	6
House 3 bed	1	2	42	42	84
Visitor Parking (flats)	0	0.1	48	0	4.8
TOTALS			96	76	147

*Site is in Zone 2, Zone 1 shown for reference only



4.9 PUBLIC EXHIBITION

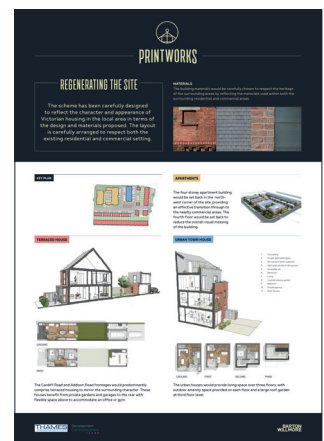
The public Exhibition was held on the 10th July 2017 at the Reading Deaf Centre, 131 Cardiff Road, RG1 8JF.

Thames Properties has undertaken the public consultation in advance of submitting a planning application to ensure local stakeholders have had an opportunity to comment on the emerging proposals. The consultation process was managed by Development Communications to ensure that it is fully in line with the requirements of Reading Borough Council's Statement of Community Involvement, and other consultation guidelines. Specifically, Development Communications has:

- Ensured that the consultation has taken place as early as possible in the process
- Conducted an engagement programme that is appropriate for the local community and key stakeholders
- Conducted a well- publicised and accessible exhibition
- Explained clearly what the scope of the consultation is and what can and cannot be changed
- Analysed the results from the consultation objectively
- Over 615 flyers advertising the public exhibition were distributed to residential and commercial properties in close proximity to the site.
- A press release with details of the public consultation was released to the press and articles were included in the Reading Chronicle and GetReading press ahead of the public exhibition.
- In response to the consultation questions, the importance of adequate onsite parking was widely supported, whilst there was agreement that the additional residential accommodation will help housing demand in Reading, and very strong support for a playground in the development.



FIGURE 20: SEVEN EXHIBITION BOARDS ON DISPLAY





5.

DESIGN RESPONSE



5.1 INTRODUCTION

The concept behind the development from a strategic view is the consolidation of the residential area neighbouring the Core Employment Area and simplifying the relationship between residential uses and industrial uses.



FIGURE 21: EXISTING BUILDINGS DEMOLISHED



5.2 DESIGN

The new buildings are designed to mediate in form, scale, use, design and materials between the existing brick terraced houses along Cardiff Road and Addison Road and the immediate context of the industrial estate with its larger building types and road and public space designed around large vehicles rather than pedestrians, cyclists and family vehicles.

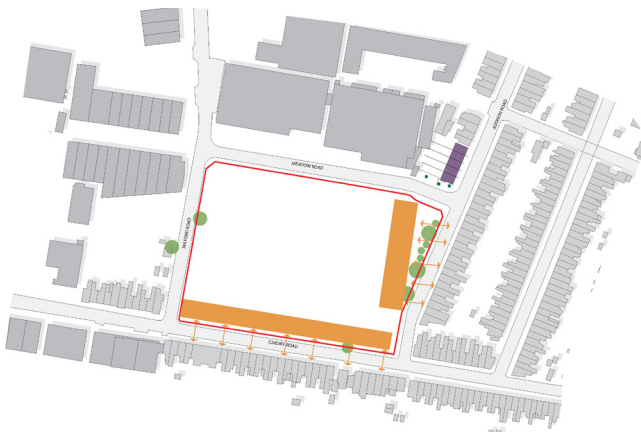


FIGURE 22: TERRACED FAMILY HOUSES TO REFLECT RESIDENTIAL



FIGURE 23: LANDSCAPE BUFFER TO MEDIATE TO EMPLOYMENT AREAS

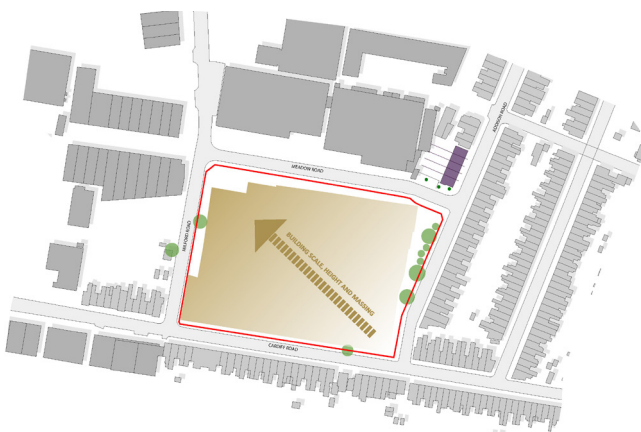


FIGURE 24: BUILDING SCALE, HEIGHT AND TYPE RESPONDING TO CONTEXT



FIGURE 25: HIGH QUALITY RESIDENTIAL PUBLIC REALM AND ENVIRONMENT



5.3 LAYOUT AND FORM

The scheme is derived from the key relationships to the context. The strong terraces and street enclosure to the residential streets is echoed in the strong line of terraced family housing that fronts on to Cardiff Road and Addison Road.

Whilst the existing terraced housing has a strong and distinctive character, there are some shortcomings of these existing typologies, the most obvious of which include:

- the lack of car parking,
- lack of provision for secure bicycle parking and storage,
- lack of provision for bins and recycling resulting in the small frontage areas being dominated by wheelie bins
- a lack of street trees and soft landscape in the thresholds to the plots
- as well as very narrow housetypes restricting flexibility for these houses to be successfully adapted and changed over time

The proposed terraced houses that face onto these street frontages aim to mirror the existing types, but overcome these shortcomings with a range of design measures that improve them making high quality contemporary residential development.

The access within the site runs from east to west, and utilises the existing carriageway crossing on Addison Road and the entrance in this location to the site. This route creates a central spine which organises the proposals around a central paved square and a proposed Green space which includes a children's play area accessible to the wider neighbourhood.

The proposed building types change from the terraced family homes to the south and east of the site to the row of street facing townhouses to the north of the central green space and on to the apartment building to the northwest of the site facing on to the neighbouring CEA. The apartment block is well screened from the employment uses by a significant landscape edge to the west and north, ensuring that residential amenity is not compromised by the location and proximity of employment uses and also creating a graded change between the existing terraced houses and the employment area. This is a significant improvement in the relationship between residential family housing and employment uses in the current site layout and arrangement. The development within the Cox and Wyman site is designed to safeguard any proposed residential units from adjacent commercial uses and not constrain continued employment use within the remainder of the CEA.



FIGURE 26: AERIAL VIEW FROM NORTH WEST CORNER



FIGURE 27: AERIAL VIEW FROM SOUTH EAST CORNER





FIGURE 28: PROPOSED SITE PLAN





5.4 USE

New Build Apartments (Blocks A and B)

Block A is a new 4 storey block delivering 1, 2 & 3 bed affordable residential apartments with defined and separate entrance and circulation. Block B is to the east of the podium and delivers 1, 2 & 3 bed market residential apartments.

The two blocks share the service and parking zone at ground floor level below the first floor level podium deck providing amenity space. To the north and south of the podium deck are two sets of two townhouses creating additional active frontages to the perimeter of the block and additional family housing.

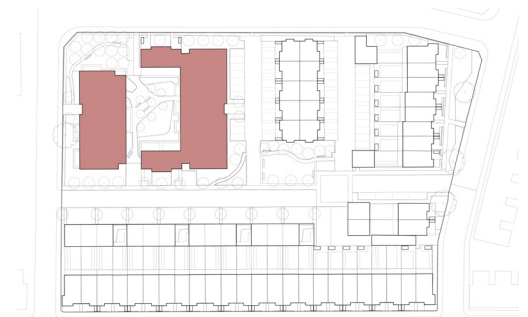


FIGURE 29: AXONOMETRIC VIEW OF APARTMENT BLOCK



LAYOUT & DESIGN

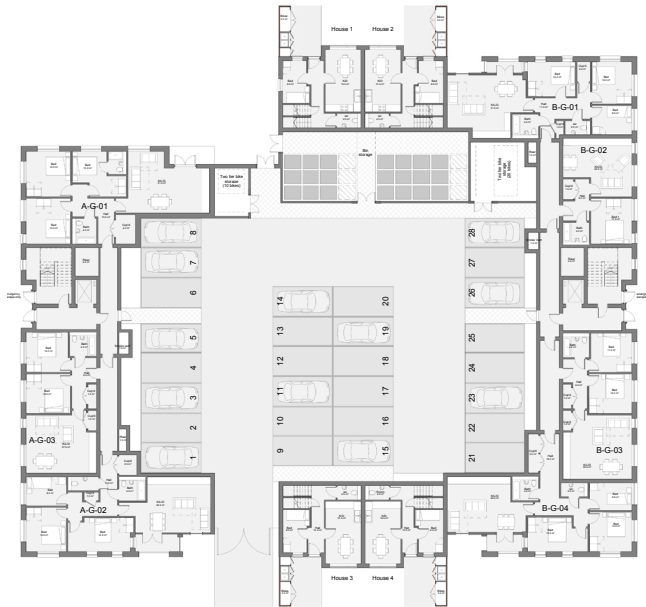


FIGURE 30: GROUND FLOOR PLAN

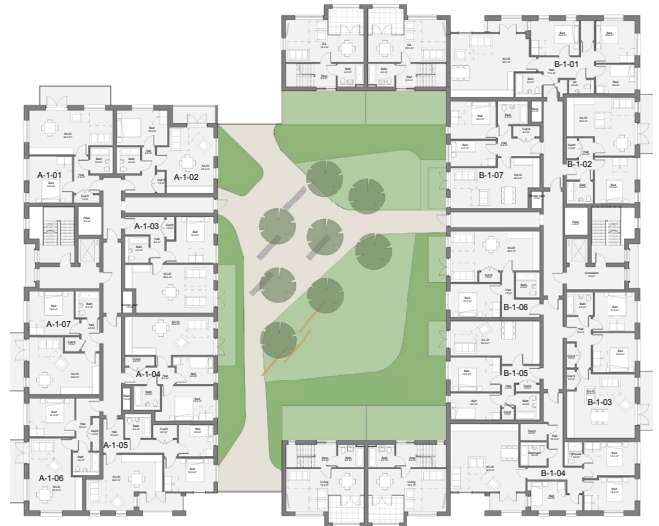


FIGURE 31: FIRST FLOOR PLAN

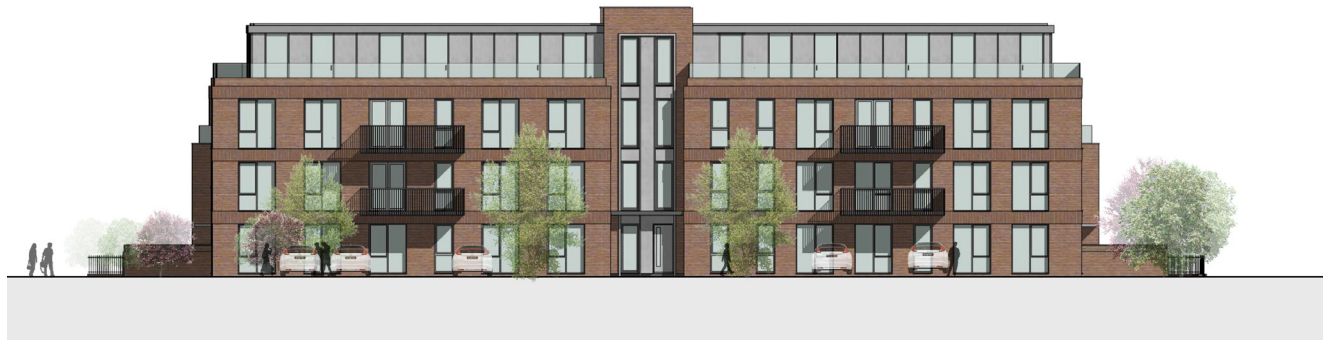


FIGURE 32: WEST ELEVATION



FIGURE 33: EAST ELEVATION



New Build Townhouses (Block C)

A new series of 10 townhouses consisting of House Type D.01 and D.02 create block C. These are arranged in a back to back format with private outdoor amenity space provided at each level including a large roof terrace.

URBAN HOUSE WITH ROOF GARDEN

This variation on the urban house seeks to maximize private outdoor amenity space. The house type provides principal living accommodation over three floors, each floor is provided with outdoor amenity space off the principal living spaces. In addition to this there is a large roof garden at third floor level.

The house type is serviced by parking directly off the access road and bin stores are provided in front of each dwelling which define defensible space to each unit. The design creates a strong frontage with a uniform rhythm, making a positive contribution to the existing linear street pattern.



1. Car parking
2. Private defensible space
3. Bin stores & meter cupboard
4. Open plan kitchen & dining room
5. Accessible wc
6. Bathroom
7. Living
8. Covered balcony garden
9. Bedroom
10. Private balcony
11. Roof Terrace



LAYOUT & DESIGN

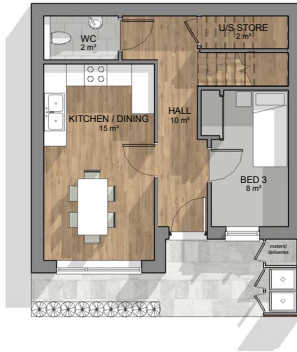


FIGURE 34: GROUND FLOOR PLAN

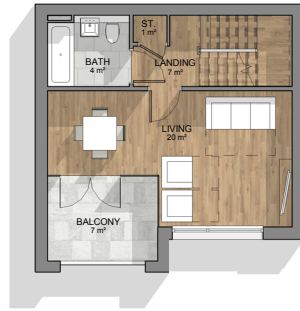


FIGURE 35: FIRST FLOOR PLAN

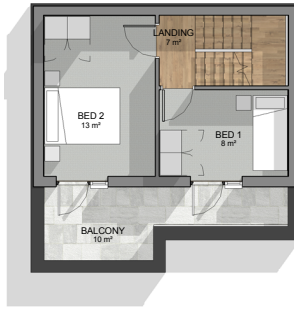


FIGURE 36: SECOND FLOOR PLAN

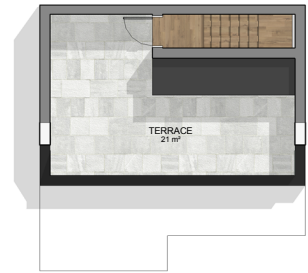


FIGURE 37: THIRD FLOOR PLAN



FIGURE 38: FRONT ELEVATION

HOUSE TYPE D	URBAN HOUSE
Aspect	Single aspect (multiple on end of terrace)
Private outdoor space	Provided at all levels of dwelling
Access for servicing	From main road to front. Bin stores on frontage within setback
Parking & storage	Allocated parking to front of dwelling. Visitor on-street parking
Bedroom numbers	3 bed per unit
Parking spaces	1-2 per unit
KEY DIMENSIONS	
Building width	7m
Building depth	6-7m
Number of floors	3.5
Plot width	7m
Depth of setback from road	6-7m
Plot depth	13m
AREAS	
Building Footprint	46.5sqm
Gross Internal Area	104sqm
Private Amenity Space	47sqm

PRECEDENT NEWHALL SOUTH CHASE, HARLOW



The development forms part of the construction of a new neighbourhood in Newhall. The project is comprised of 84 dwellings on a site of 1.62ha (52 d/ha). Four building types were used; Apartments blocks, Villa houses, Courtyard houses and terraced houses. Apartment blocks and villa houses were used to mark corners and end-plots, whilst the courtyard houses and terraced houses were used inbetween.





New Build Terraced Houses (Blocks D And E)

A new series of 8 terraced houses to the northern part of the site facing Addison Road, a pair of semi-detached houses also facing Addison Road, and a group of 24 terraced houses facing Cardiff Road. This group consists of house types E.01, E.02, E.03 and E.04 either as standalone or in combination with G.02, G.03 and G.04 as part of the same demise.

TERRACED HOUSE

The two-storey terraced dwelling with potential for additional loft level accommodation replicates the scale of the Victorian terraces adjacent to the site on Cardiff Road & Addison Road.

The internal layout of the dwelling has been designed for modern living by providing flexibility between open plan living and separate private spaces.

Waste and Recycling storage is provided to the front of the property to ensure the quality of the street scene to be maintained and car parking is provided to each house via a rear mews road.

The proposed materials for the house type are sympathetic to the material palette of the immediate context. Brick and slate connect the building to the Victorian context whilst the integration of metal cladding creates a contemporary aesthetic and forms a link with the commercial units to the North.

1. Private defensible space
2. Bin stores & meter cupboard
3. Living
4. Accessible wc
5. Kitchen / Dining
6. Private Garden
7. Parking to rear
8. Bedroom
9. Airing Cupboard
10. Landing
11. Bedroom
12. Loft





FIGURE 39: GROUND FLOOR



FIGURE 41: FRONT ELEVATION



FIGURE 40: REAR ELEVATION

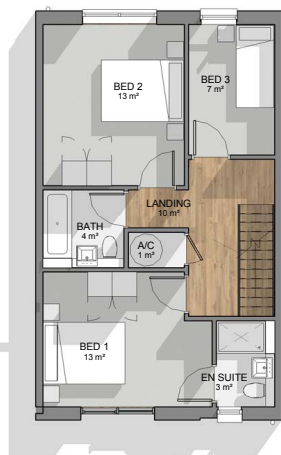


FIGURE 42: FIRST FLOOR

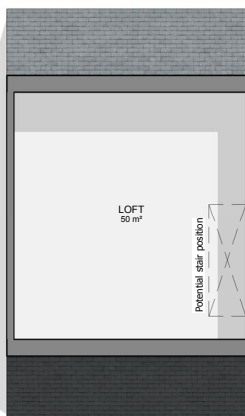
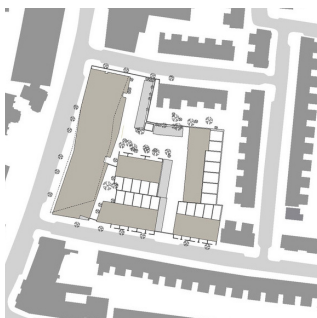


FIGURE 43: LOFT / SECOND FLOOR

BUILDING TYPE	STREET TERRACE
Aspect	Dual aspect (multiple on end of terrace)
Private outdoor space	Rear gardens
Access for servicing	From mews to rear
Parking & storage	Rear mews access to private garage and storage shed. Visitor on-street parking
Bedroom numbers	2/3 per unit
Parking spaces	1-2 per unit
KEY	
DIMENSIONS	
Building width	5-5.75m
Building depth	10m
Number of floors	2-2.5
Plot width	5-5.75m
Depth of pavement setback	2.5-3.3m
Plot depth	23.4m
AVERAGE AREAS	
Plot area (gross)	140sqm
Building area (gross internal)	108sqm (2 storey)
Private Amenity Space	57.5sqm

PRECEDENT HIGHMEAD, ANGEL EDMONTON, ENFIELD



The scheme of 118 new residential units (including 22 houses) was part of a comprehensive investment programme to regenerate the London Borough of Enfield. The site is surrounded by two storey terraced houses on three sides and the town centre to one boundary. Enfield council saw the delivery of a landmark building as an important part of the regeneration of the area.

The variety of mass and scale of the buildings creates landmarks, defines site boundaries and creates defensible private areas. To the rear of the main block, the addition of sensitively designed energy efficient houses completes the Victorian suburban fabric which was previously missing. This was achieved by creating a linear street pattern with a strong rhythm and frontage onto the main road.





HOUSE TYPE A (with Garage)

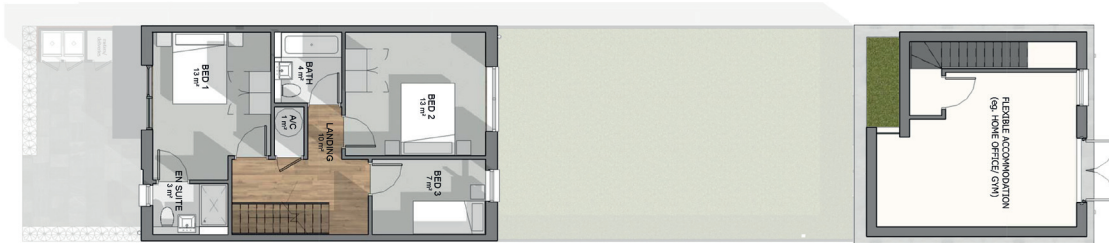


FIGURE 45: FIRST FLOOR

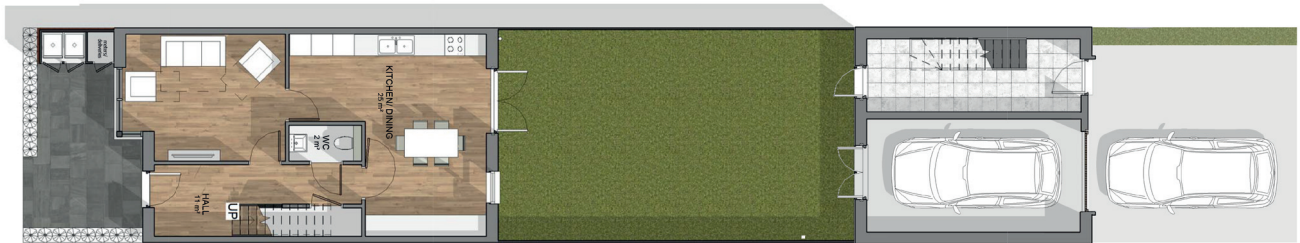


FIGURE 44: GROUND FLOOR

1. Private defensible space
2. Bin stores & meter cupboard
3. Living
4. Accessible wc
5. Kitchen / Dining
6. Private Garden
7. Garage
8. Car parking
9. Home office/gym
10. Bedroom
11. Airing Cupboard
12. Landing
13. Bedroom
14. Loft





REAR MEWS PRECEDENT

ACCORDIA, CAMBRIDGE



The scheme at Accordia in Cambridge provided terraced houses with additional flexible use studios or landscaped decks to provide adaptable space to accommodate the needs of contemporary family life in an urban environment. The design creates an animated mews with active frontages which provide the parking for the scheme.





5.5 AMOUNT

In total 96 residential units are proposed for the site, with a mix of one, two, three and four bedroom units. The range of unit types is considered appropriate for this location, and the inclusion of a relatively high proportion of three is in response to the stated housing need in the borough for family housing.

Of the 96 units total, 50% are houses and 50% are flats. In addition to that, 50% of the total number of units are three bed or more, consistent with RBC's policy requirements.

The proposals include for 30% affordable and the mix and distribution of this is to be confirmed through discussions with RBC.



FIGURE 46: GROUND FLOOR PLAN



5.6 DENSITY

The proposed scheme is for 96 units. This is within the appropriate density for an Urban site as stated in Policy CS15 at 40-75 dwellings per hectare. For this site at 1.31ha, this represents a range between 52 and 98 dwellings.

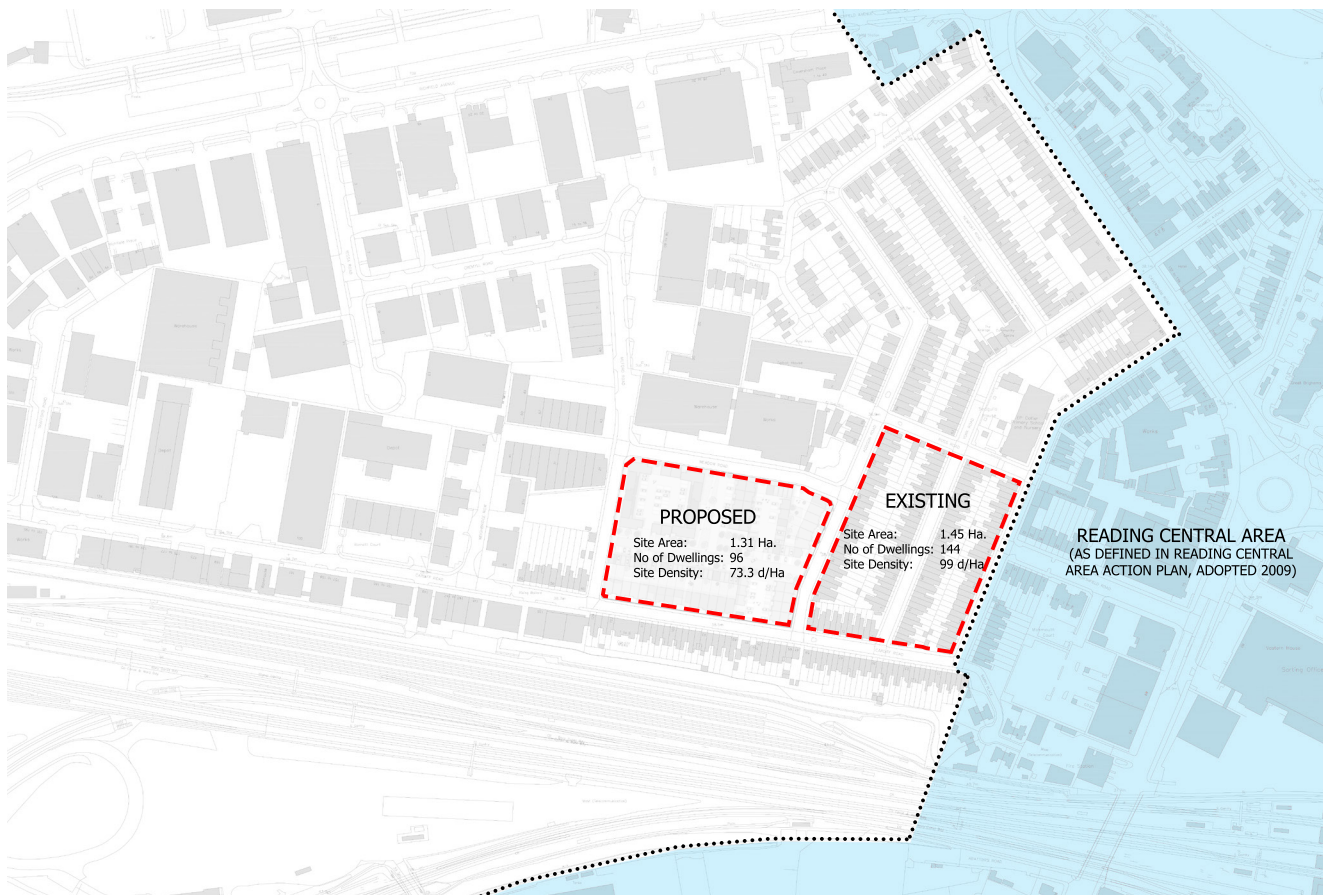


FIGURE 47: DENSITY STUDY



5.7 ACCOMMODATION SCHEDULE

APARTMENTS

DESCRIPTION			AREAS		UNIT TYPE						OCCUPANCY	
Floor	Flat No	Unit Type	GIA (sqm)	GIA (sqft)	Studio	1 bed	2 bed	3 bed	4 bed	Total Units	Habitable Rooms	Occupants
G	A-G-1	3b/6p	98.1	1056				1		1	4	6
G	A-G-2	3b/5p	92.0	990				1		1	4	5
G	A-G-3	2b/4p	67.7	729			1			1	3	4
G	B-G-1	3b/5p	87.3	940				1		1	4	5
G	B-G-2	1b/2p	51.7	556		1				1	2	2
G	B-G-3	2b/4p	70.2	756			1			1	3	4
G	B-G-4	3b/5p	95.2	1025				1		1	4	5
1	A-1-1	1b/2p	51.6	555		1				1	2	2
1	A-1-2	1b/2p	50.0	538		1				1	2	2
1	A-1-3	1b/2p	58.0	624		1				1	2	2
1	A-1-4	2b/3p	61.0	657			1			1	3	3
1	A-1-5	2b/3p	63.0	678			1			1	3	3
1	A-1-6	1b/2p	50.1	539		1				1	2	2
1	A-1-7	1b/2p	50.0	538		1				1	2	2
1	B-1-1	3b/5p	89.0	958				1		1	4	5
1	B-1-2	1b/2p	51.9	559		1				1	2	2
1	B-1-3	2b/4p	70.2	756			1			1	3	4
1	B-1-4	3b/5p	96.2	1035				1		1	4	5
1	B-1-5	2b/3p	61.4	661			1			1	3	3
1	B-1-6	1b/2p	53.7	578		1				1	2	2
1	B-1-7	2b/3p	63.4	682			1			1	3	3
2	A-2-1	1b/2p	51.6	555		1				1	2	2
2	A-2-2	1b/2p	50.0	538		1				1	2	2
2	A-2-3	2b/4p	70.6	760			1			1	3	4
2	A-2-4	2b/3p	61.0	657			1			1	3	3
2	A-2-5	2b/3p	63.0	678			1			1	3	3
2	A-2-6	1b/2p	50.1	539		1				1	2	2
2	A-2-7	1b/2p	50.0	538		1				1	2	2
2	B-2-1	3b/5p	89.0	958				1		1	4	5
2	B-2-2	1b/2p	51.9	559		1				1	2	2
2	B-2-3	2b/4p	70.2	756			1			1	3	4
2	B-2-4	3b/5p	96.2	1035				1		1	4	5
2	B-2-5	2b/3p	61.4	661			1			1	3	3
2	B-2-6	2b/3p	65.6	706			1			1	3	3
2	B-2-7	2b/3p	63.4	682			1			1	3	3
3	A-3-1	2b/4p	71.7	772			1			1	3	4
3	A-3-2	1b/2p	49.0	527		1				1	2	2
3	A-3-3	1b/2p	49.0	527		1				1	2	2
3	A-3-4	1b/2p	52.4	564		1				1	2	2
3	A-3-5	2b/4p	70.3	757			1			1	3	4
3	A-3-6	1b/2p	53.9	580		1				1	3	4
3	B-3-1	2b/3p	65.0	700			1			1	3	3
3	B-3-2	1b/2p	49.0	527		1				1	2	2
3	B-3-3	1b/2p	56.5	608		1				1	2	2
3	B-3-4	2b/4p	78.2	842			1			1	3	4
3	B-3-5	2b/3p	61.4	661			1			1	3	3
3	B-3-6	2b/3p	65.5	705			1			1	3	3
3	B-3-7	2b/3p	63.4	682			1			1	3	3
TOTALS			3111	33487	0	19	21	8	0	48	134	152



HOUSES

DESCRIPTION				AREAS (inc garages)		UNIT TYPE						OCCUPANCY	
House Type	Garage Type	House No.	Unit Type	GIA (sqm)	GIA (sqft)	Studio	1 bed	2 bed	3 bed	4 bed	Total Units	Habitable Rooms	Occupants
C-02	n/a	1	3p/4p	101	1085				1		1	5	4
C-01	n/a	2	3p/4p	101	1085				1		1	5	4
C-02	n/a	3	3p/4p	101	1085				1		1	5	4
C-01	n/a	4	3p/4p	101	1085				1		1	5	4
D-01	n/a	5	3p/4p	109	1171				1		1	5	4
D-01	n/a	6	3p/4p	109	1171				1		1	5	4
D-02	n/a	7	3p/4p	104	1117				1		1	5	4
D-02	n/a	8	3p/4p	104	1117				1		1	5	4
D-02	n/a	9	3p/4p	104	1117				1		1	5	4
D-02	n/a	10	3p/4p	104	1117				1		1	5	4
D-02	n/a	11	3p/4p	104	1117				1		1	5	4
D-02	n/a	12	3p/4p	104	1117				1		1	5	4
D-01	n/a	13	3p/4p	109	1171				1		1	5	4
D-01	n/a	14	3p/4p	109	1171				1		1	5	4
E-01	G/R	15	3b/5p	172	1855				1		1	6	5
E-02	n/a	16	3b/6p	114	1224				1		1	5	6
E-02	n/a	17	3b/6p	114	1224				1		1	5	6
E-02	n/a	18	3b/6p	114	1224				1		1	5	6
E-02	n/a	19	3b/6p	114	1224				1		1	5	6
E-02	n/a	20	3b/6p	114	1224				1		1	5	6
E-02	n/a	21	3b/6p	114	1224				1		1	5	6
E-03	G/R	22	3b/5p	166	1789				1		1	6	5
E-03	G/R	23	3b/5p	166	1789				1		1	6	5
E-04	G/R	24	3b/5p	165	1778				1		1	6	5
E-01	n/a	25	3b/5p	105	1132				1		1	5	5
E-02	G	26	3b/6p	135	1454				1		1	5	6
E-02	G	27	3b/6p	135	1454				1		1	5	6
E-02	n/a	28	3b/6p	114	1224				1		1	5	6
E-02	n/a	29	3b/6p	114	1224				1		1	5	6
E-02	n/a	30	3b/6p	114	1224				1		1	5	6
E-02	n/a	31	3b/6p	114	1224				1		1	5	6
E-02	n/a	32	3b/6p	114	1224				1		1	5	6
E-02	G/T	33	3b/6p	148	1591				1		1	6	6
E-04	G/R	34	3b/5p	165	1778				1		1	6	5
E-04	G/R	35	3b/5p	165	1778				1		1	6	5
E-04	G/R	36	3b/5p	165	1778				1		1	6	5
E-02	G/T	37	3b/6p	148	1591				1		1	6	6
E-04	G/R	38	3b/5p	165	1778				1		1	6	5
E-04	G/R	39	3b/5p	165	1778				1		1	6	5
E-04	G/R	40	3b/5p	165	1778				1		1	6	5
E-02	G/T	41	3b/6p	148	1591				1		1	6	6
E-04	G/R	42	3b/5p	165	1778				1		1	6	5
E-04	G/R	43	3b/5p	165	1778				1		1	6	5
E-04	G/R	44	3b/5p	165	1778				1		1	6	5
E-02	G/T	45	3b/6p	148	1591				1		1	6	6
E-04	G/R	46	3b/5p	165	1778				1		1	6	5
E-04	G/R	47	3b/5p	165	1778				1		1	6	5
E-01	G/R	48	3b/5p	172	1855				1		1	6	5
TOTALS				6338	68221	0	0	0	48	0	48	260	243

GRAND TOTALS

	AREAS (inc)		UNIT TYPE							OCCUPANCY		ALLOCATION	
	GIA (sqm)	GIA (sqft)	Studio	1 bed	2 bed	3 bed	4 bed	Total Units		Habitable Rooms	Occupants	Private	Affordable
TOTALS	9463	101861	0	19	21	56	0	96		394	395	67	29
			0%	20%	22%	58%	0%	100%				70%	30%



5.8 AMENITY

Private open space is desirable in all circumstances and, in general, the more private open space provided per home, the better. All dwellings should be provided with adequate private open space in the form of a garden, terrace, balcony or roof terrace.

All of the gardens to the 34 terraced houses are 10metres deep or more, and the full width of the terraced house.

There are 14 townhouses which are provided with private outdoor space at each level of the dwelling. The private amenity space provided is equal to the footprint of the dwelling. The design of these houses has been carefully developed to provide an environment suitable for contemporary urban living.

The apartments have a shared outdoor amenity courtyard over the ground floor parking area, and in addition they enjoy significant balconies and at upper levels roof terraces.

Standards:

- Private outdoor spaces should have level access.
- The general minimum depth and width of all balconies and other private external spaces is 1500mm.
- External balconies are also provided to all the apartments. These are generally the projecting type and all meet the minimum size standards and are all 1500 mm deep.
- Further shared external amenity for the private and affordable residential makes up the remaining central private podium space at 1F level above parking and service area accessible directly via circulation cores.



FIGURE 48: AMENITY SPACE



5.9 SCALE

The principle of development is for the proposed scheme to negotiate the transition in scale between the existing terraced family houses to the south and east of the site and the larger scale employment uses buildings in the CEA.

In order to integrate the proposals successfully into the context, the new buildings are designed to match that adjacent scale, with terraced housing mirroring the terraced housing surrounding the site, and the larger townhouse and apartment blocks located to the parts of the site that are bounded by employment uses.

Through the design evolution the scale of proposals has been constantly adjusted and refined to more successfully achieve this desired mediation between the surrounding built form, as well as in response to consultation comments received during the formal pre-application process with officers views from the immediate and surrounding area, sunlight and daylight and townscape considerations.



FIGURE 49: SCALE



5.10 APPEARANCE

The scheme proposes high quality materials and contemporary architectural expression to deliver a high-quality scheme that is both relevant and appropriate to this site.

In the apartment building, elevation design has been carefully developed to articulate verticality and add depth to the façade. The proposed elevations reference the composition of the existing commercial element of the existing buildings, with their distinctive 1930's modernist aesthetic. Window profiles, spandrel panels, louvres and balconies are of the same set of powder coated RAL finishes, whilst the brickwork detailing is contemporary, the mix of brick stock references the rich brickwork facades in the existing buildings on site.

Generally the elevations are extensively glazed with large, full height deep window reveals and balconies. Windows and balconies are placed in an orderly manner and recessed appropriately to create a formal façade which responds to the larger scale buildings in the immediate vicinity.

The top storey of both apartment blocks is set back and metal clad in powder coated aluminium profiles to match the window profiles used elsewhere in the scheme, reducing the perceived scale and massing of the proposals and to add compositional interest to these blocks.



FIGURE 50: SITE SECTIONS

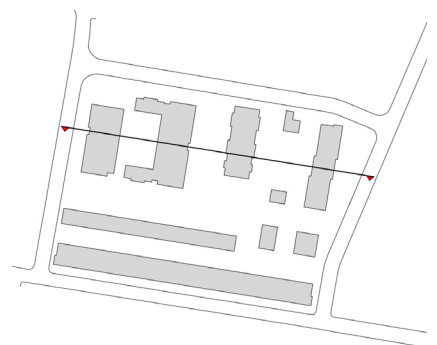
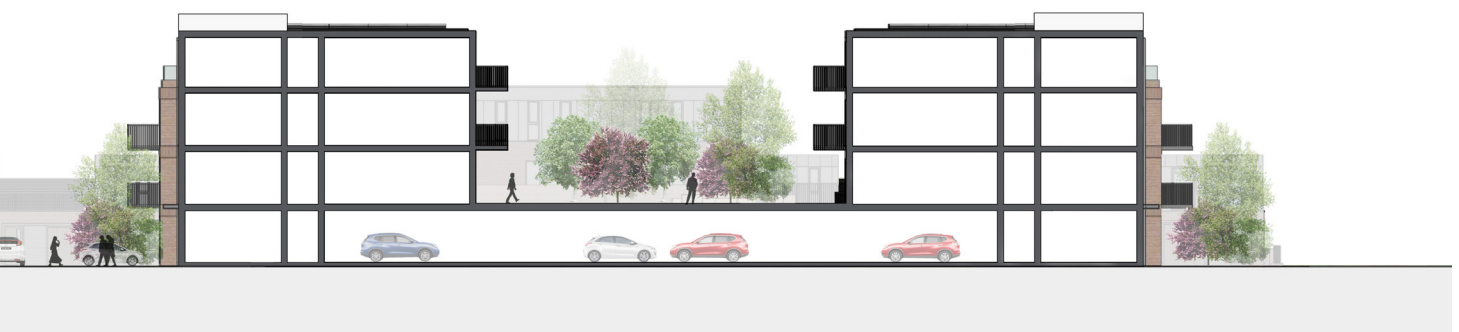




FIGURE 51: WEST ELEVATION (1)



FIGURE 52: EAST ELEVATION (2)

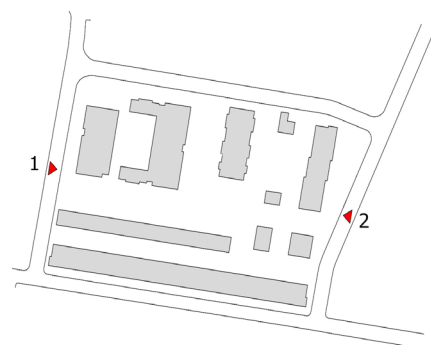




FIGURE 53: NORTH ELEVATION (3)



FIGURE 54: SOUTH ELEVATION (4)

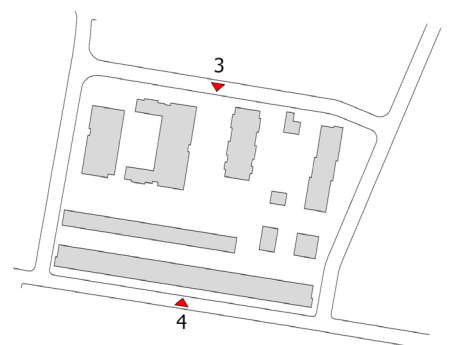




FIGURE 55: SITE INTERNAL SOUTH ELEVATION (5)



FIGURE 56: SITE INTERNAL NORTH ELEVATION (6)

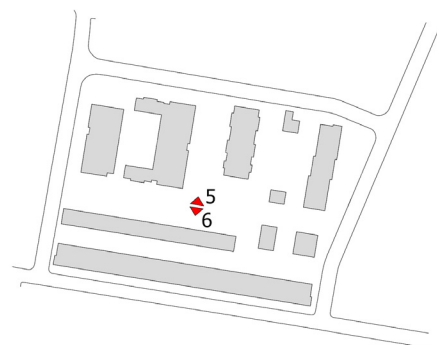




FIGURE 57: SITE INTERNAL WEST ELEVATION (7)

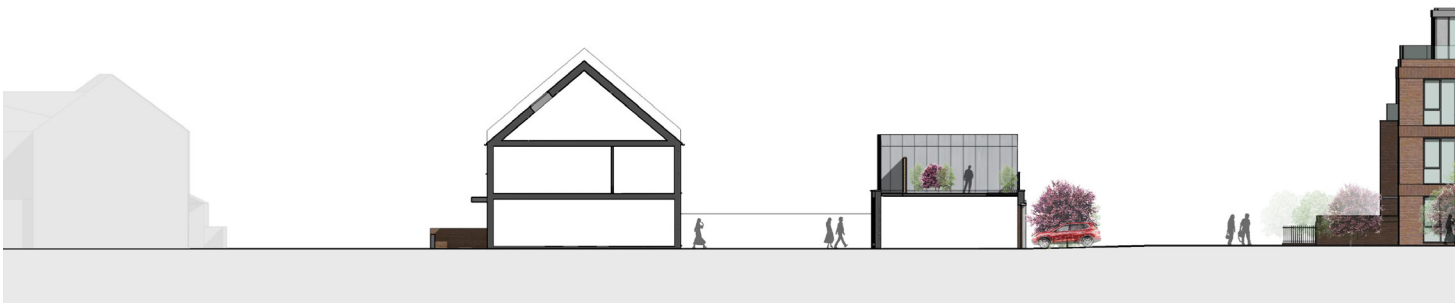


FIGURE 58: SITE INTERNAL EAST ELEVATION (8)

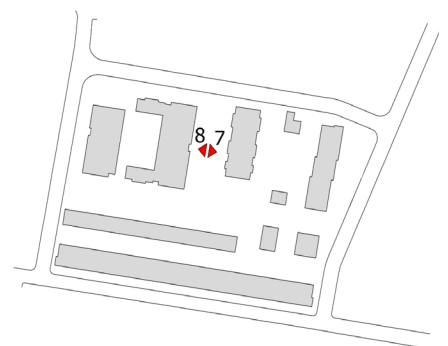




FIGURE 59: VIEW ALONG ADDISON ROAD



FIGURE 60: VIEW OF CENTRAL GREEN SPACE & LOCAL AREA FOR PLAY



FIGURE 61: VIEW FROM APARTMENT BALCONY



FIGURE 62: VIEW FROM TOWNHOUSE ROOF TERRACE



5.11 TECHNICAL STRATEGIES

Sustainability

The Proposed Development will follow good practice sustainable design and construction practices in line with Reading Borough Council Core Strategy. Given the withdrawal of the Code for Sustainable Homes, the Proposed Development will not undertake a Code assessment, but will use Code 'Level 4' as a design framework.

Key targets:

- 20% CO² emissions reduction beyond Part L 2013 through use of passive design and energy efficiency measures, Combined Heat and Power (CHP) and PV array.
- Targeting an internal water consumption to 110litres/person/day.
- Provision of easily accessible waste and recycling storage.
- Provision of secure and weatherproof cycle storage spaces.
- Good practice targets for Considerate Constructor Scheme and environmental procedures to limit impacts during the construction process.
- Explore opportunities to enhance the ecological value of the Site with a neutral impact as a minimum

Siting & Location

The site is located very close to Reading Train Station (0.5 miles, 11 minutes estimated walking time) and local bus routes (Pink Route from Swansea Road or Caversham Road Fire Station) and is well catered for in term of local amenities on Swansea and Caversham Roads.

The position and orientation of the site as a standalone block fully circumscribed by roads (Cardiff, Meadow, Addison and Milford) means that there is minimal potential for over-looking and over-shadowing issues.

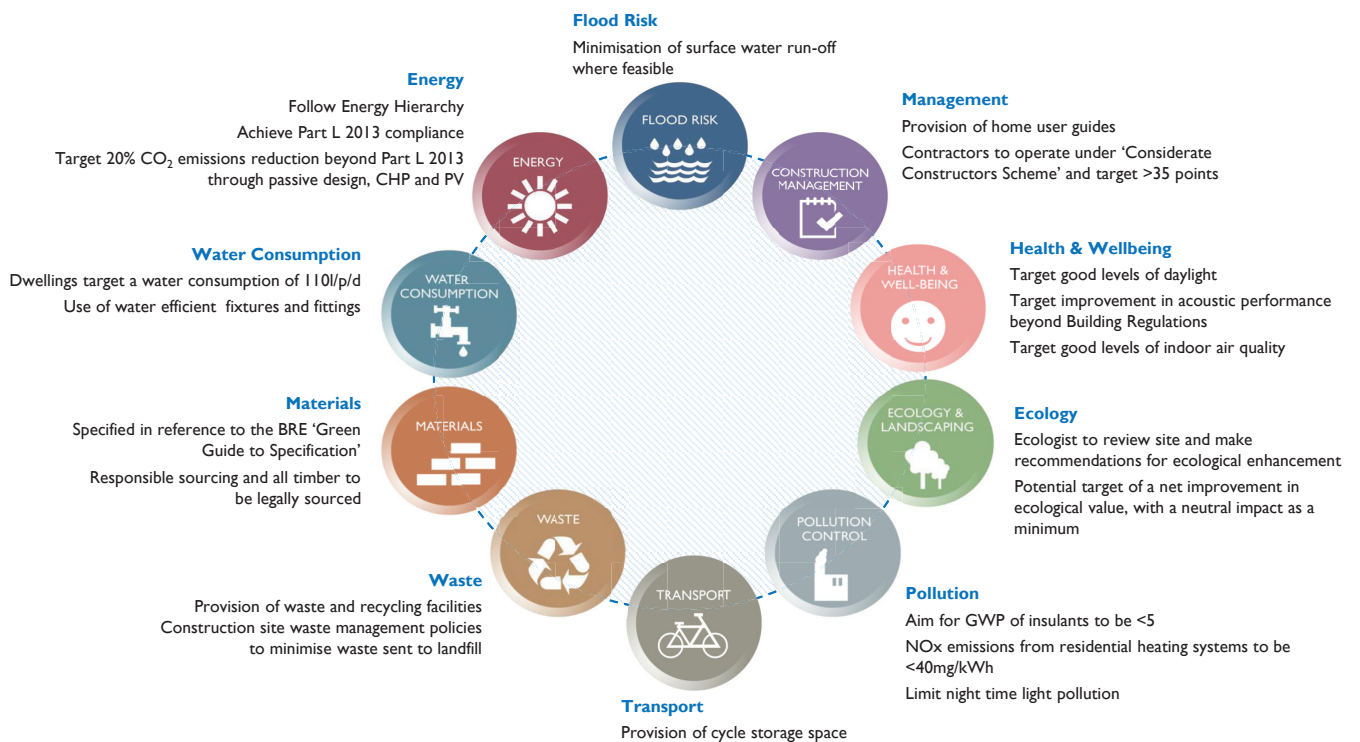
The scheme represents a compact, sympathetic and energy efficient proposal on an urban infill site.

Structure & Fabric

The fabric of the new buildings will be in line with current construction industry standards as defined in the Building Regulations Approved Documents.

Energy Efficiency

The fabric of the building will be in line with current construction industry standards as defined in the Building Regulations Approved Documents.





5.12 SAFETY AND SECURITY

The scheme has been designed with reference to the Secured By Design Standards SBD Homes 2016.

Parking Court / Ground Floor

The Vehicular / Pedestrian Access Gate to the parking area is to meet LPS 1175, Security rating 2. The gate to be operated by remote key fob (all key fob data is to be logged to assist police investigations).

All car / motorcycle parking is localised as close to the allocated residential units as possible. All parking spaces are to be clearly marked to make allocation and ownership clear.

Lighting and Surveillance

The parking area scheme is designed to have clear sight lines wherever possible, however as it is a covered car park there are several structural and services installations that will create visual interruptions such as intermediate columns or walls. There are many areas where there are very good lines of sight for both natural surveillance and CCTV surveillance. Lighting will be designed to comply with the relevant BS and EN standards, and the will ensure that all areas are clearly and evenly lit. These will be motion sensor LED type fittings.



FIGURE 63: AERIAL VIEW OF SCHEME



Residential

Compartmentalisation – residents to have access restricted to only the spaces that they need to go to.

Ground floor units and units facing onto the shared amenity spaces of the podium are to have identifiable defensible space. These will be demarcated with shrub and hedge planting so as to avoid planters which could be used for sitting on or used as climbing aids.



FIGURE 64: VEHICLE ENTRANCE TO COVERED PARKING AREA



6. LANDSCAPE



6.1 LANDSCAPE

Active edges, permeability and legibility through materials, furniture and tree selection are paramount to the success of the landscape strategy.

Place Making

The focus is on placemaking, quality of design and overall appearance, considering how people will use and pass through the series of spaces that make up the wider public realm strategy.

The layout, design approach and selection of materials highlight the primary focal areas and provide a relationship between building and landscape.

Active edges, permeability and legibility through materials, furniture and tree selection are paramount to the success of the landscape strategy.

The streets have been designed and detailed to provide a high quality and robust public realm which reflects the level of quality found in the architecture.

Materials

The use of materials and planting reinforces the character and function of each space and provides clear legibility to both the existing and proposed pedestrian priority routes.

Contrasting but complementary pavement colours have been specified to highlight footpaths and reinforce a 'safeguard' zone for pedestrians.

Footpaths and roads are paved using a range of quality pre-cast concrete blocks using different colours and bonds to demark roads and shared spaces.

Sustainable urban drainage in the form of porous block paving has been used on the shared surface streets, using the sub base to attenuate over ground flows.

Kerb heights vary across the site but generally a small 25mm up-stand has been adopted to allow ease of access for people in wheel chairs whilst also providing a suitable tapping edge for stick users with restricted vision.

Resin bound gravel is used in pathways through more natural areas such as the Community Orchard and naturalised play amenity.

Amenity

Private terraces and frontages have a simple textured flag finish, areas are left clutter free for personalisation by the individual, whether through potted plants, tables and chairs.

Rear gardens have privacy fence panel, with heights dropping to 1.2m height after a privacy panels to encourage neighbourly interaction, maintain visual connections and in response to sunlight analysis.

The flatted communal roof garden has been designed to provide a secure lush environment which can be used by a range of residents throughout the year. This semi-private zones are an important feature for the residential clusters that overlook them.

The soft landscape strategy has been designed to create a verdant heart to the new development.

Deep layered planting beds with low hedging, evergreen hardy shrubs and ground cover help reinforce the edges of the space whilst maintaining clear views.

Play

The scheme includes Local Area Play (LAP) provision, located on a pedestrian route and included within a verdant soft landscape heart to the scheme.

Heritage

The landscape strategy in a subtle way references some existing building features and reincorporates these in to the scheme.



FIGURE 65: ILLUSTRATIVE MASTERPLAN

LEGEND

- ① Vehicular access road with square feature paving
- ② Shared surface treatment along residential streets
- ③ Landscaped frontage to Addison Road
- ④ Private roof terrace
- ⑤ Tree Avenue with meadows and incidental play
- ⑥ Residents Courtyard Garden Lawn - Communal
- ⑦ Residents Courtyard Garden Deck - Communal
- ⑧ Shrub planting
- ⑨ Orchard with meadow providing communal focus and incidental play
- ⑩ Boundary treatment : dwarf wall with railings and hedge
- ⑪ Proposed Trees
- ⑫ Private residents gardens
- ⑬ Local Area of Play 'LAP' with natural play and play equipment.
- ⑭ Existing tree



Soft Landscape

Landscape Strategy

The planting strategy can be defined by a set of simple principles outlined below. The tree selection broadly follows recognisable design codes for species selection and scale within streets.

Shrub and ground cover planting takes reference from tried and tested planting combinations. The beds are layered high to low, from back to front to create diversity in appearance, ease of maintenance and best practice for plant establishment long term.

Street Trees

Appropriate street tree species such as *Pyrus calleryana* Chanticleer (Pear) are located along streets. These tend to have good straight stems, strong leaders, clear stem up to 2.5m and have uniform and compact canopy shape. These street trees are located with sufficient sight line and canopy clearance from road junctions, drives, dwellings and structures.

A street will have one common species selection for consistency and uniformity. By varying the species selection in different streets an individual character zone can be created.

Tree selection has avoided species which are typically more susceptible to the up-take of pollution, which could negatively affect plant growth.

Roof Garden Trees

Within the communal roof garden area trees will provide seasonal variety and visual interest and typically have a smaller established height and canopy spread. Multi-stem trees are also seen as appropriate in these more secluded and private spaces.

Pollution Control

Pollution control has also informed the tree species selection. Trees are considered to reduce pollution by actively removing it from the atmosphere. The pores on the leaf surface, take in polluting gases which are then absorbed by water inside the leaf.

An example is the Birch trees (*Betula pendula*): Their leaves are covered in tiny hairs and ridges which catch pollutants. Equally important is the trees structure and habit which is sparse, light and helps keep the air circulating and flowing past the leaves to filter it effectively. Each time it rains, the pollution is washed off the leaves, allowing them to start trapping more.

Tree selection with higher potential for pollution control are:

- *Pyrus calleryana* Chanticleer
- *Betula pendula*

Use of some evergreen species for shrubs and hedges would improve the pollution reduction potential due to year round photosynthesis. For this reason, Ivy is an excellent plant for pollution control. The use of living fences covered in English ivy.

Hedge & Shrub Layer

Planting beds will typically be layered front to back and contain a mixture of native and ornamental species. Shrub beds will have structural planting to maintain a verdent green appearance year round, layered with more seasonal variety and texture. Car park dividers are planted with robust single species.



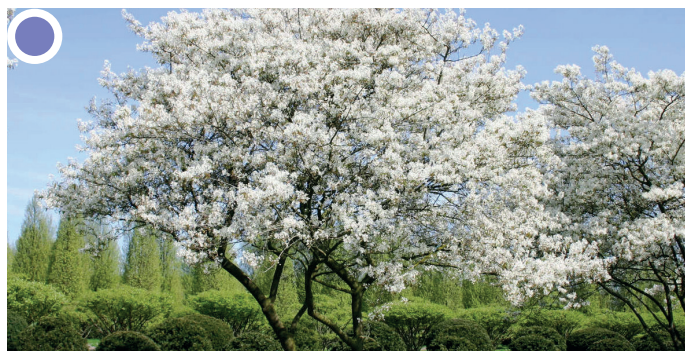
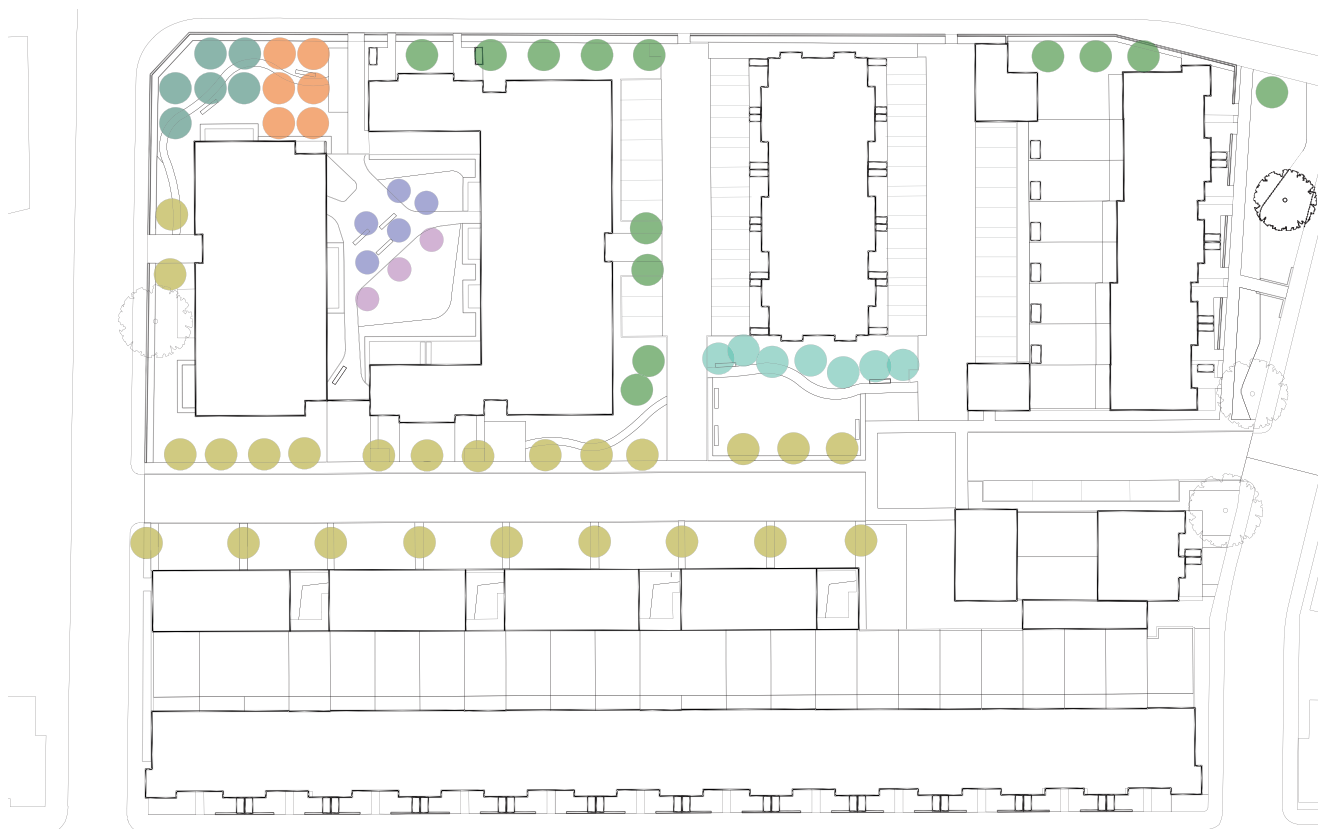
FIGURE 66: SEASONAL VARIETY IN MIXED PLANTING BEDS



FIGURE 67: LAYERED PLANTING



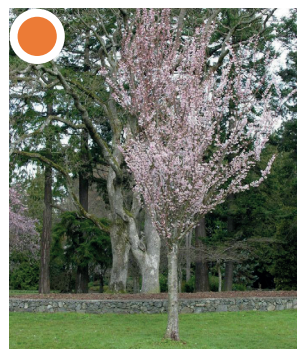
FIGURE 68: STRUCTURAL EVERGREEN SHRUBS AND HEDGING



Amelanchier lamarckii



Betula utilis Jacquemontii multi-stem



Prunus domestica 'Victoria'



Acer campestre Elsrijk



Betula pendula



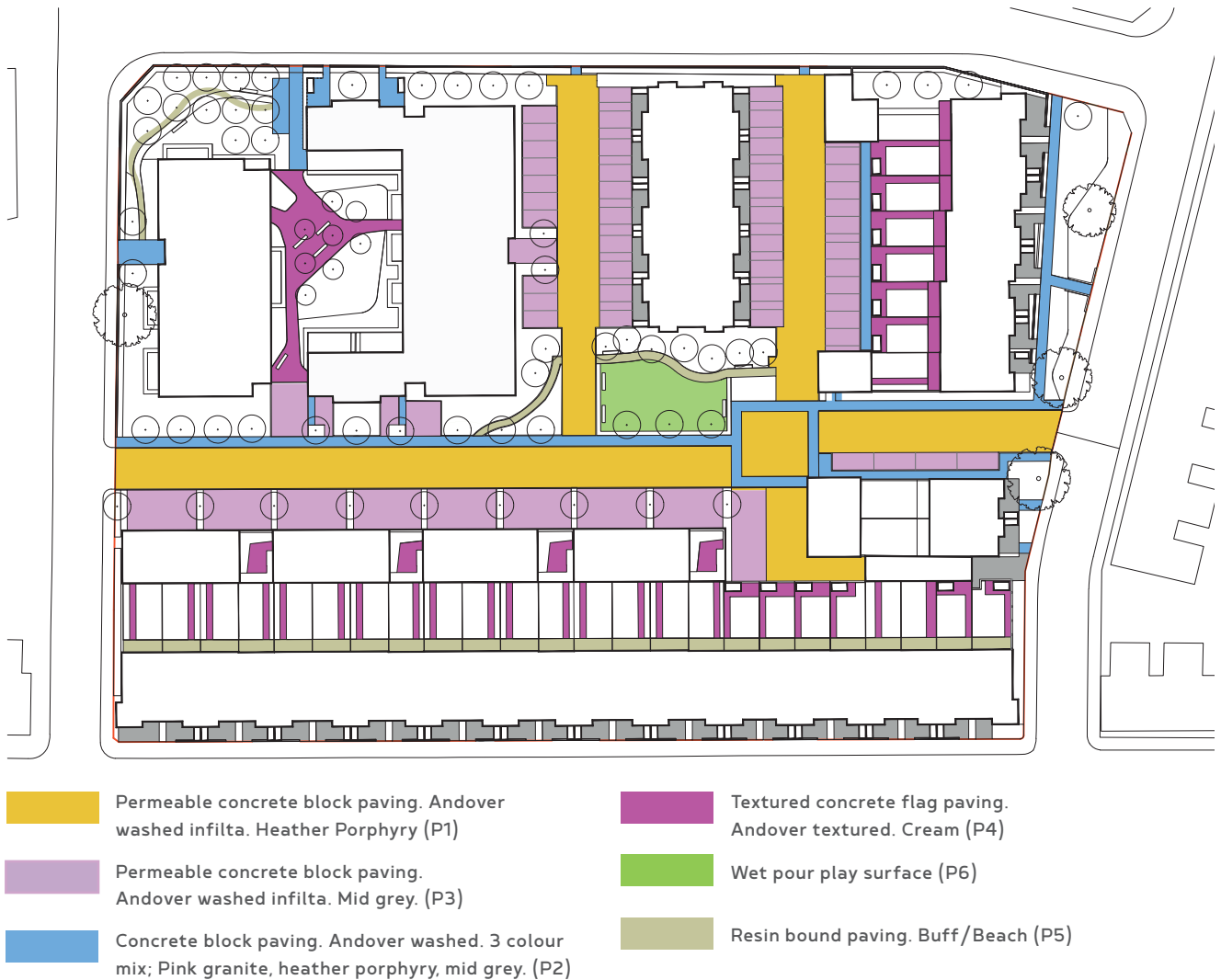
Pyrus calleryana Chanticleer

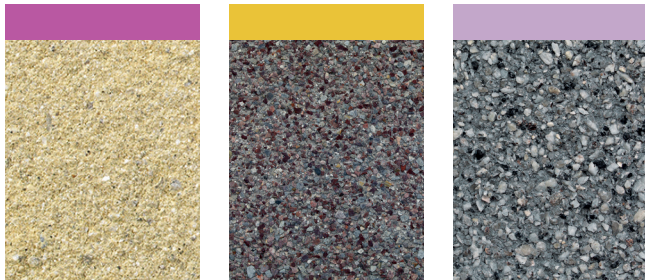


Malus domestica 'Falstaff'



FIGURE 69: HARD LANDSCAPE MATERIALS





Hard Landscape

Materials have been chosen to reflect the hierarchy of spaces, whether shared surface, private driveways, pedestrian routes, communal areas, entrance and access paths and interfaces with proposed and existing key areas.

Materials have been selected on the basis that they are robust, have an appropriate lifespan and require minimal maintenance, to ensure longevity and minimise the need for elements to be replaced over time.

Colour tones and references have been drawn from the warm brick tones of the Architecture.

A high proportion of paved surfaces are permeable, with the necessary Engineer designed sub base.

Dark grey block paving has been specified for parking spaces so oil drop is less obvious.

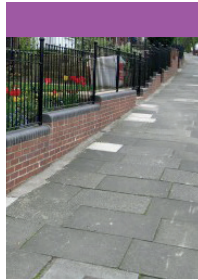
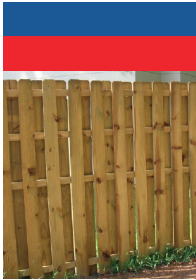
Footpaths and roads: These are paved using a range of pre-cast concrete porous blocks using different colours and bonds to demark roads and shared spaces. Contrasting but complementary pavement colours have been specified to highlight footpaths and reinforce a 'safeguard' zone for pedestrians.



FIGURE 70: FENCING TYPES



- | | | | |
|---|---|---|--|
|  | 1.8m ht. Timber hit and miss privacy fence panel. Followed by 1.2m ht. hit and miss fence. (F1) |  | 1.2m ht. vertical bar railing, black, with hedge. (F4) |
|  | Proposed 1.2m ht. timber hit and miss fence. (F2) |  | 600mm ht. dwarf brick wall with railings on top. (F5) |
|  | 600mm ht. dwarf brick wall. (F3) |  | 1.8m ht. brick wall. (F6) |
|  | 1.8m ht. brick piers and railings. (F7) | | |

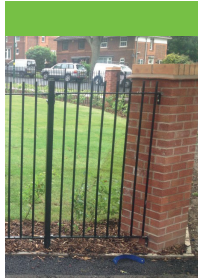


Fencing

Street furniture is kept to a minimum requirement in order not to clutter the street and inhibit movement.

Timber fencing defines rear garden boundaries. There is a single 1.8m or height hit and miss fence panel, followed by 1.2m height panels.

The boundary treatments vary appropriate to the active frontage, separation and security requirements of the street elevations. These are a combination of dwarf brick walls with either hedge and or railings. Where required 1.8m ht. brick walls have been proposed.



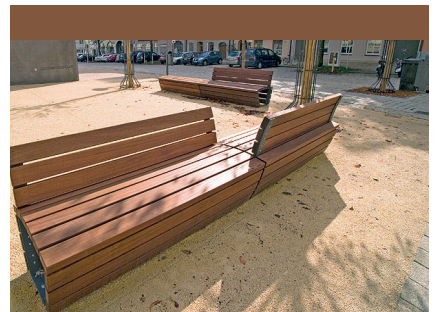
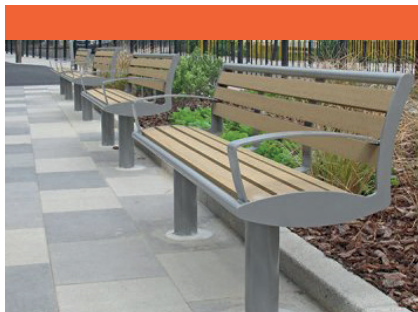
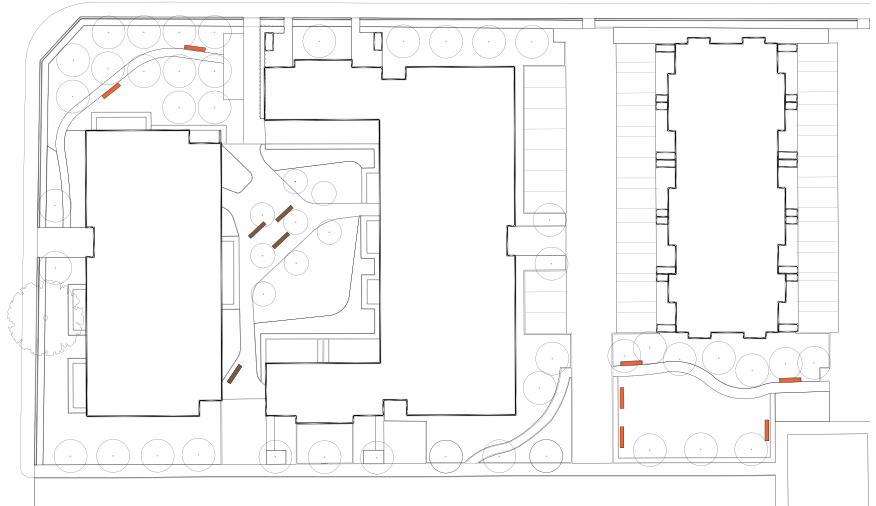


Furniture

Street furniture is kept to a minimum requirement in order not to clutter the street and inhibit movement.

Seating has been placed within the communal centre of the scheme along primary pedestrian routes. Seating is also included within the LAP. Seating in these locations will have lift assist arm rests.

The roof garden courtyard also includes more contemporary seating for passive amenity and incidental play.



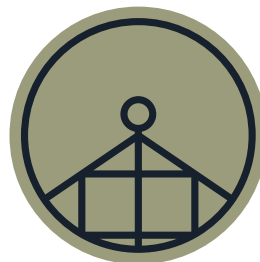
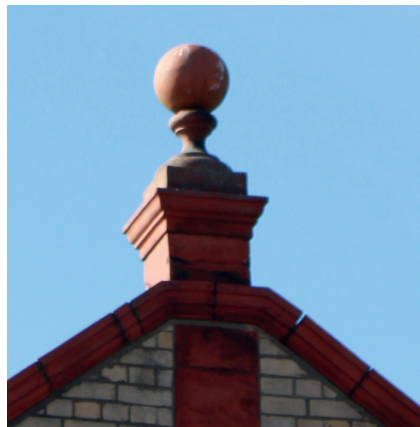


Heritage

The landscape strategy will reference the finials found on the gable ends of the existing buildings.

This subtle reference will be picked up within two dwarf brick walls with piers and topped with the retained finials as removed from the existing buildings.

The new brick wall is to reflect the brick type, colour and finishing detailing of the existing wall and have a toothed feature underneath the capping.





Play Strategy

The main focus is the dedicated Local Area of Play (LAP).

The scheme provides an interesting small area of open space specifically dedicated and laid out for younger children (under 6's) to be able to play close to where they live.

The dedicated play space play has been located at the heart of the scheme, on a primary pedestrian route that is anticipated to be well used.

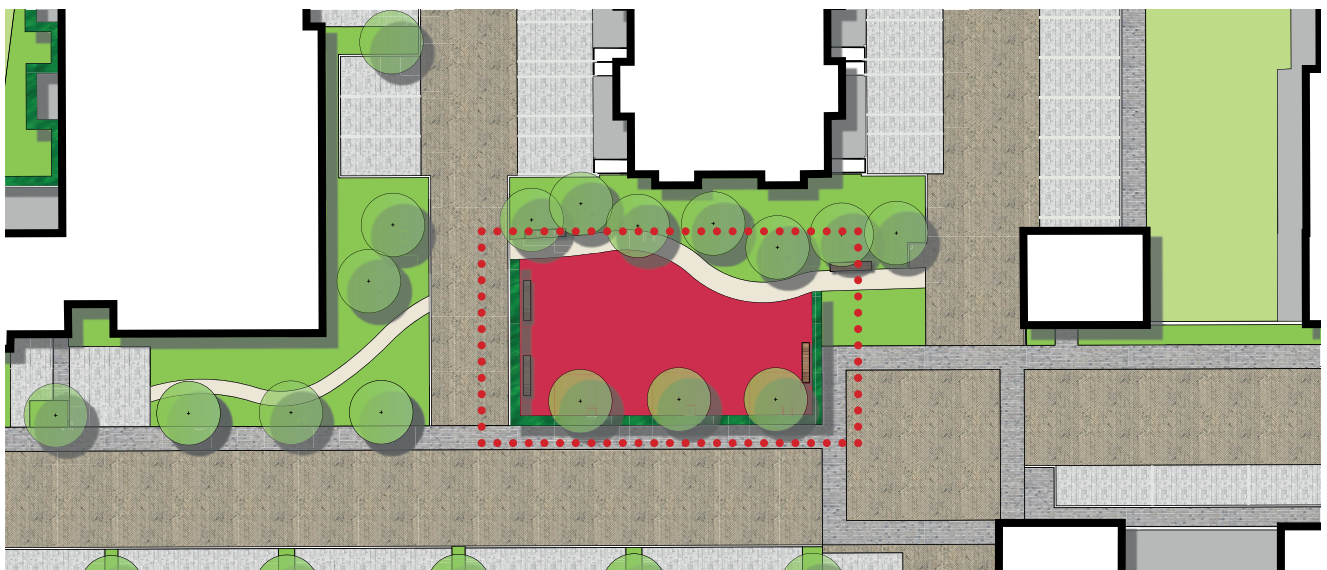
There is a separation buffer zone from properties and has both a hedge and guardrail/fencing to indicate its perimeter.

Signage will also be included to indicate 'children's play and no dogs allowed'.

The inclusion of play within the scheme is aimed at enticing children to engage with other children, help them develop physically, emotionally and socially and in doing so enliven the community hub at the heart of the scheme.

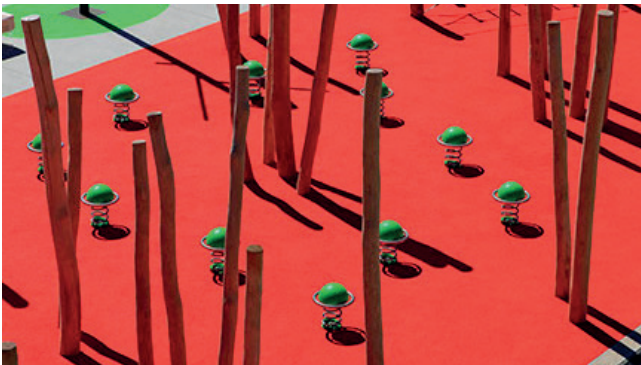
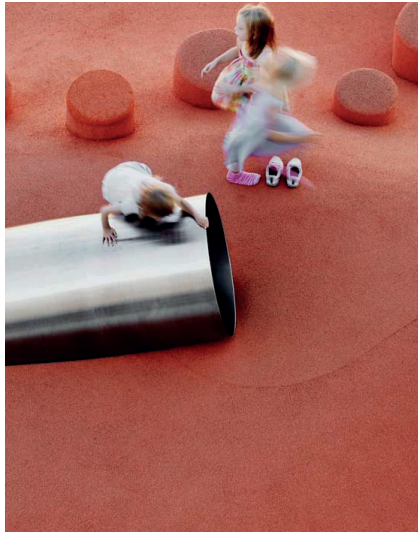
The play space will be integrated amongst a natural landscape appearance, enclosed by an evergreen hedge and be secure with vertical bar railings and accessed via gates.

FIGURE 71: PROVISION OF LOCAL AREA OF PLAY





PRECEDENT IMAGES





Key Spaces

Located between the blocks is the residential courtyard garden accessible from each block to all residents.

The garden provides residents with both hard and soft amenity space, the majority of which is grass lawn.

Planting along the courtyards edges provides privacy separation, but also contributes to the colour, biodiversity and visual interest of the space.

Trees in the courtyard are selected to have light canopies, with seasonal interest.



FIGURE 72: PODIUM ROOF GARDEN



PRECEDENT IMAGES





7. ACCESS



7.1 ACCESS PRINCIPLES

An inclusive environment does not necessarily attempt to meet every single need, but by considering people's diversity, inclusive environments can break down barriers and exclusion and will often achieve superior solutions that benefit everyone.

The term 'inclusive design' relates as much to the design process as to the final product and also to management, operation and information, bonding user experience with professional expertise.

'Inclusive Design' therefore extends from inception, through the planning process, detail design, construction, occupation, management and operation.

This section consists of the Access Statement that relates to the proposals. It supports the Design Statement and the planning drawings submitted for this planning application. The aim is to provide a clear description of how the users of the proposed development will access, and be guided throughout the building and the site, without discrimination or limitation.

It considers, but is not only limited to, the access and circulation needs of a wide range of people including parents with children, the elderly and the disabled.

An Access Statement is work in progress and as such evolves throughout the design and construction period. This initial Access section of this Statement reviews the scheme against current legislative requirements. It deals with the design, up to planning, and the aspirations of the design for its development and final realisation through the construction process.



FIGURE 73: APARTMENT BLOCK ELEVATION



7.2 LEGISLATION, STANDARDS AND GUIDANCE

This section has been prepared according to the following sources:

- Equality Act 2010;
- Building Regulation Approved Document Part M 2015 edition incorporating 2016 amendments Volume 1;
- British Standards 8300:2009;
- ODPM's Planning & Access for Disabled People: Good Practice Guide (March 2003);
- National Planning Policy Framework 2012;
- Building Sight – P Barker et al, RNIB 1995;
- Designing Lifetime Homes – J Brewerton et al, Joseph Rowntree Trust; and
- Wheelchair Housing Design Guide, second edition by Stephen Thorpe and Habinteg Housing Association.



7.3 TRAVEL TO SITE

Public Transport

The Site has a good level of accessibility to public transport with Pink route bus services from Caversham Road into Reading Town Centre and to Caversham Heights, Caversham, Emmer Green and Caversham Park. In addition, the X39 and X40 from Richfield Avenue connects to Woodcote, Wallingford and Oxford, which provides an adequate level of accessibility to public transport.

Low floor buses, which assist wheelchair accessibility, are provided on these bus routes.

The site is approximately 11 minutes' walk from Reading Railway Station. Reading station is a major transport hub, and is the second busiest interchange station outside London with over 3.8 million passengers changing trains at the station annually. Three train operating companies

serve the station: Great Western Railway, CrossCountry and South West Trains. These services offer direct trains to London, Southampton, Bristol, Cardiff, Birmingham, Manchester, and many other major destinations.

Car Parking

Car parking is near individual units across the site. The terraced houses and townhouses have car parking directly outside or adjacent to the homes.

The apartment block is served by a ground floor level covered car park and a provision of additional car parking spaces at surface level to the east of the block. There are additional street parking spaces provided on Meadow Road where the allocated loading bay for the Cox and Wyman site is located.

The overall provision of car and cycle spaces is consistent with the RBC standards. Please refer to the transport statement provided as part of the application submission for further details.

Cycle Provision

Cycle parking for the apartments are in secure, covered, dedicated areas within the car park zone within the podium. Direct pedestrian access is available from the circulation cores. Cycle stores will be separated from bin stores.

126 cycle spaces will be provided. These will be in secure, covered internal bicycle stores.

The terraced houses with garages will have cycle storage provided for within the garages. The Townhouses and terraced

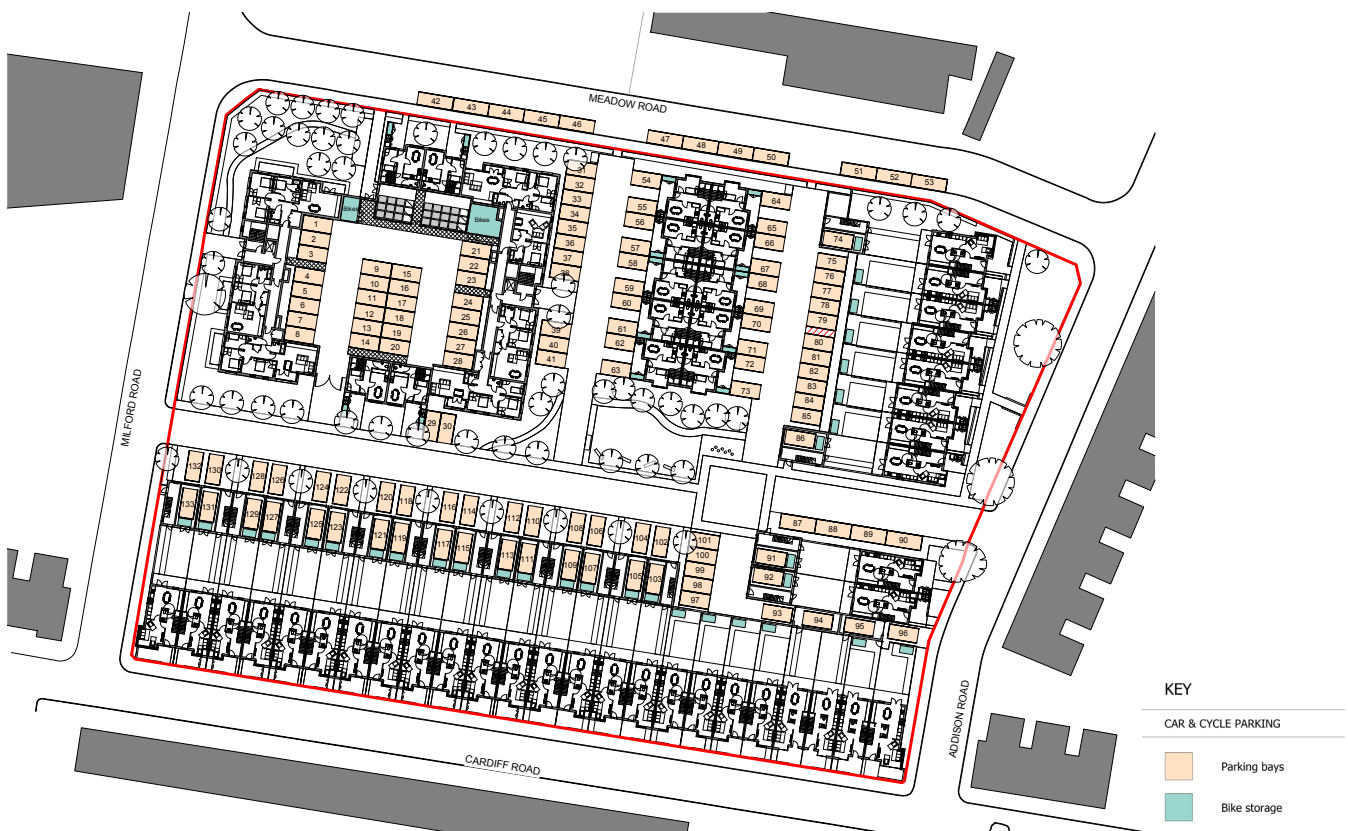


FIGURE 74: PARKING



houses without garages will have cycle storage in secure covered storage at the front of the houses or in rear gardens where there is direct access to the rear gardens.

Visitor and short stay cycle parking will be provided on the site. These will be Sheffield type stands and are intended only for these short stay uses.

Refuse Strategy

Bin and recycling provision for the apartment block is located in the parking area in a designated bin store. Direct pedestrian access is available from the circulation cores. It is connected to the bin pickup location at the boundary with Meadow Road, enabling direct access for the bin lorry from the road.

Individual terraced houses have their own dedicated covered bin stores to the front of their houses, accessed directly from the street. The townhouses also have their own dedicated covered bin stores; however they will be required to move their bins to a designated bin collection area as indicated on the plans on bin pick up days.

Access for other vehicles including services vehicles

The main access route is across the site from Addison Road and Milford Road. This access and service road will provide access for service, refuse & fire vehicles. A turning area is provided at the entrance area to the car park areas for the townhouses which will allow vehicles to turn, allowing forwards entry and exit. Fire vehicles are able to access the majority of all the buildings' perimeters.

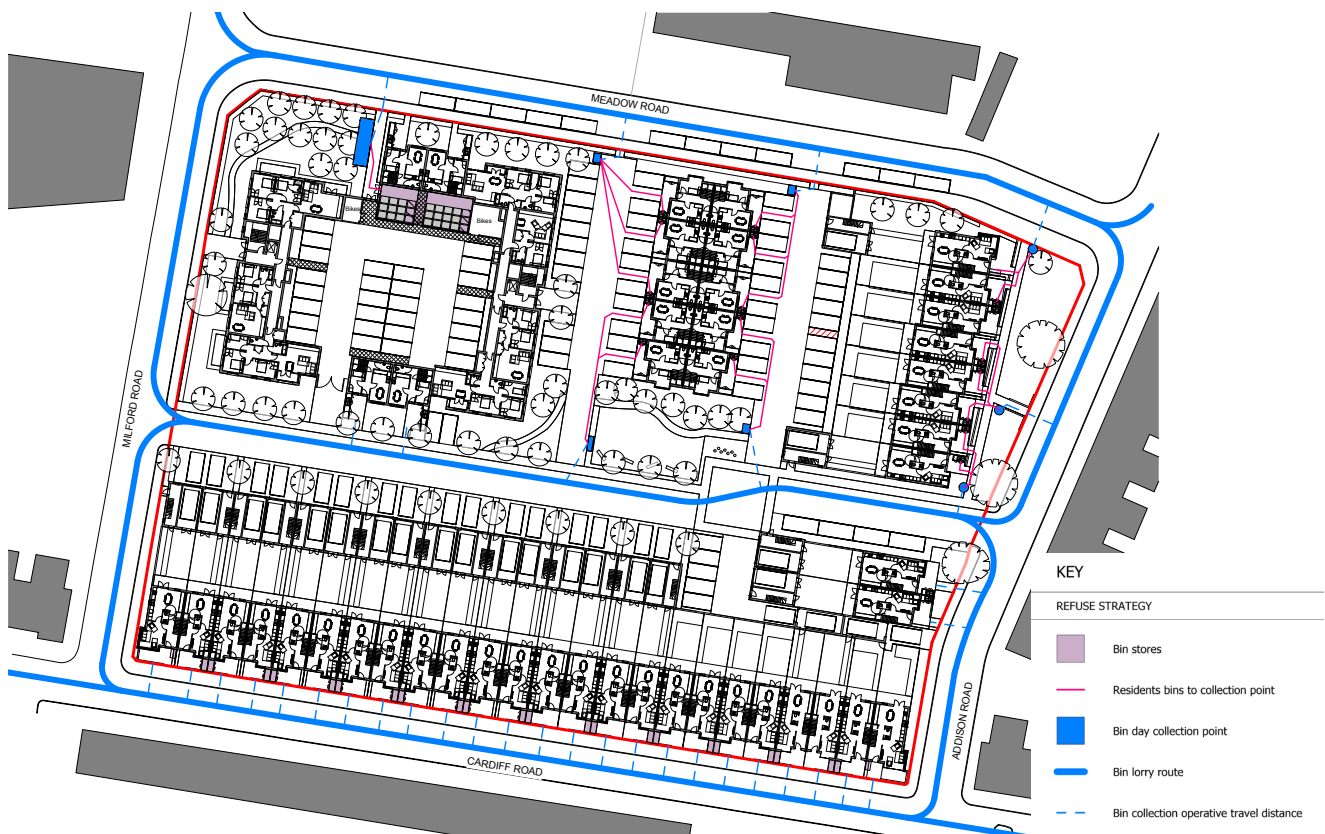


FIGURE 75: REFUSE



7.4 ACCESS PHILOSOPHY

Pedestrian approach: location and orientation of entrances

Apartments (Blocks A and B)

Pedestrian access to the residential apartment blocks is directly off Milford Road via the pedestrian path to Block A and directly from the public realm within the site for Block B.

All apartments have access to the communal amenity space via the circulation cores.

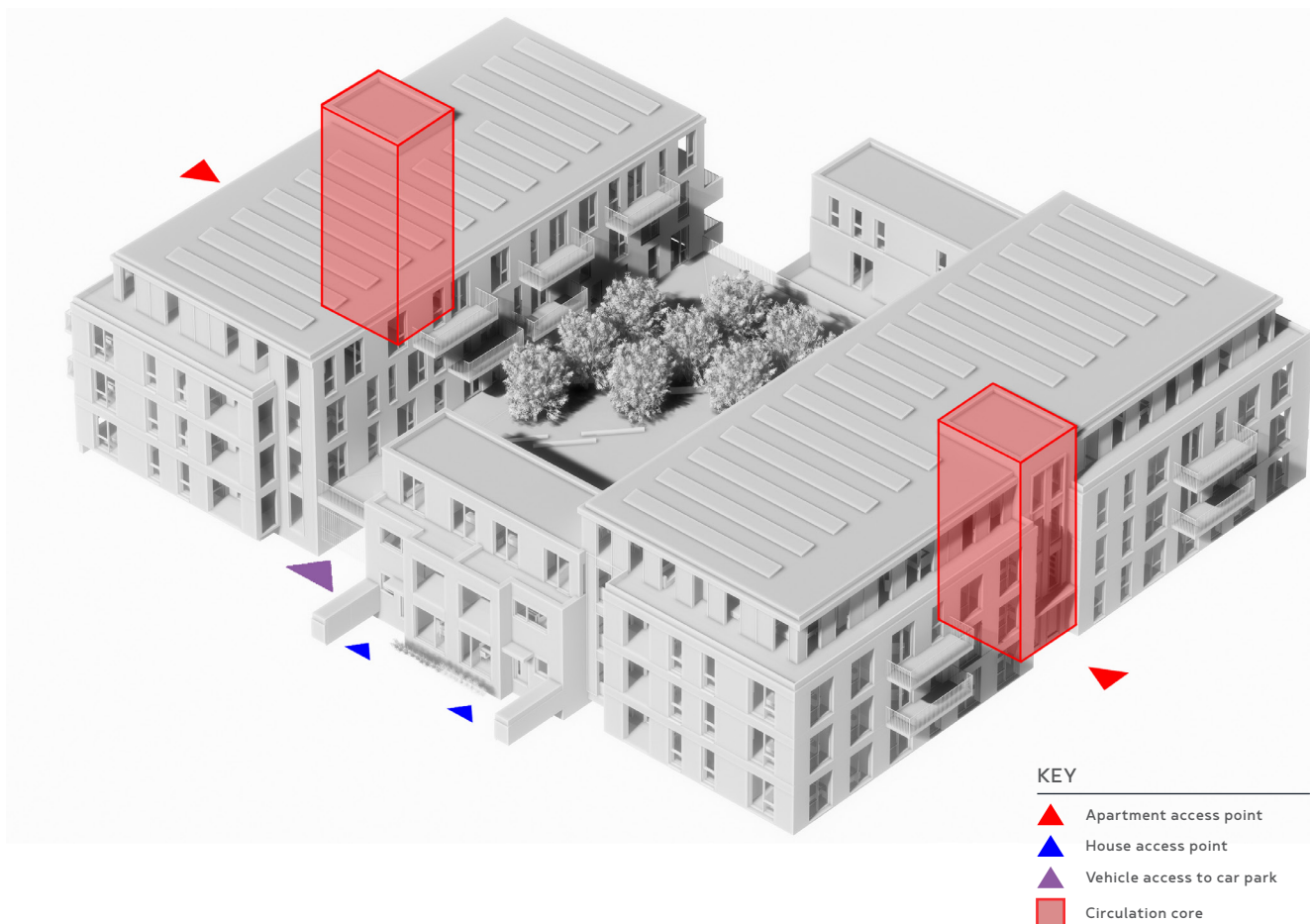


FIGURE 76: ACCESS POINTS & CIRCULATION



Townhouses and Terraced Houses

Pedestrian access to the terraced houses and townhouses is via level access in accordance with Approved Document Part M 2105 Volume 1.



FIGURE 77: HOUSE TYPE ELEVATION



7.5 BUILDING ENVIRONMENT

Above podium level there are two gaps proposed in the facades, one to the northern elevation and one to the southern side. These are to ensure that adequate levels of daylight and sunlight penetration are achieved for the shared outdoor amenity space.

This is fundamental to designing sensitive environmentally responsive buildings that maximise passive heating and lighting opportunities. Consideration will be given to ensure there are no blank facades facing onto this amenity space and that the outdoor environment is not compromised by wind conditions.

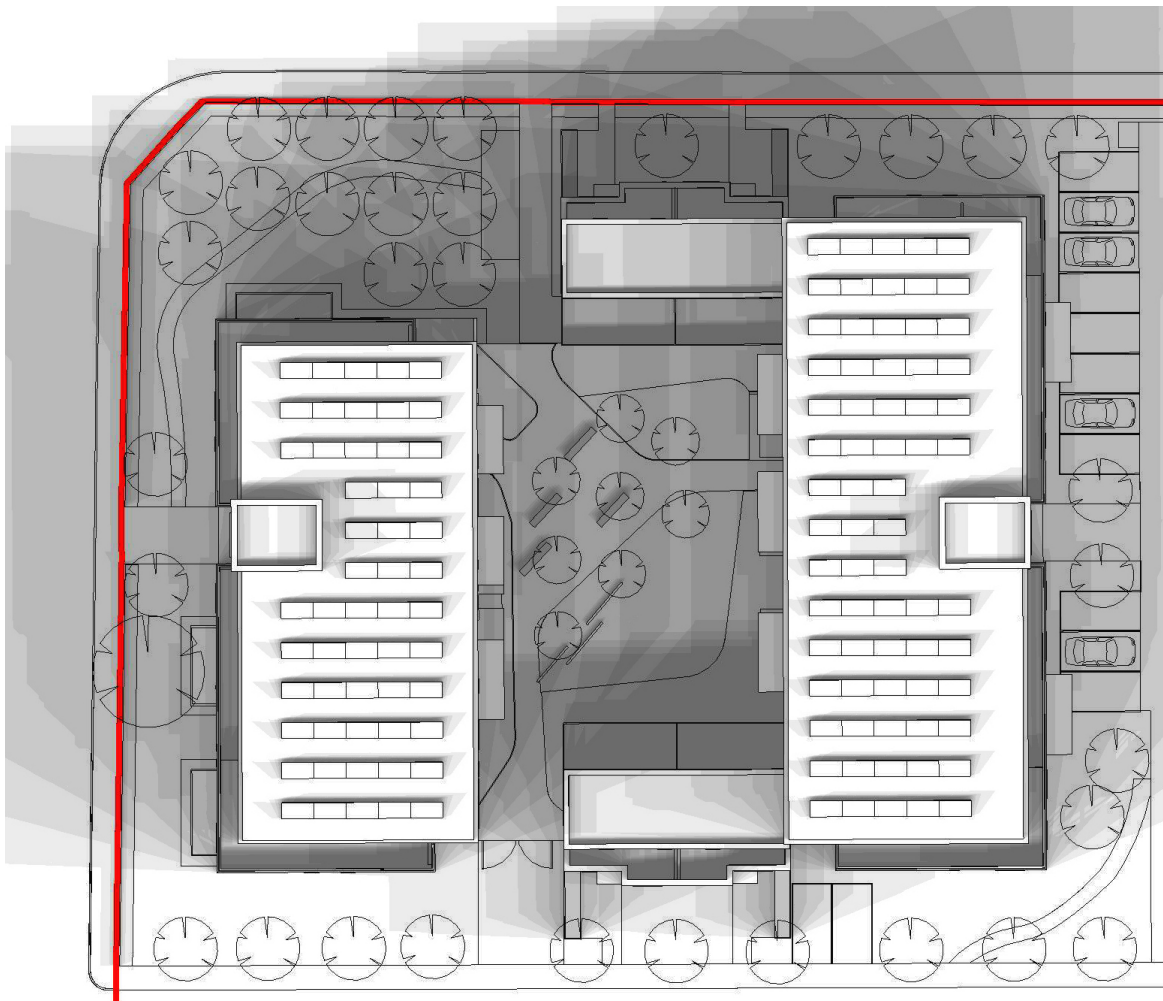


FIGURE 78: APARTMENTS SOLAR STUDY



7.6 BUILDING AND STRUCTURES

Materials

The palette of materials for the building includes Brickwork, zinc, powder coated/painted aluminium or similar metals. These materials have been specified (using Part M specifications) to contrast tonally with the ground finishes, enabling people with visual impairments to identify building boundaries.

Construction

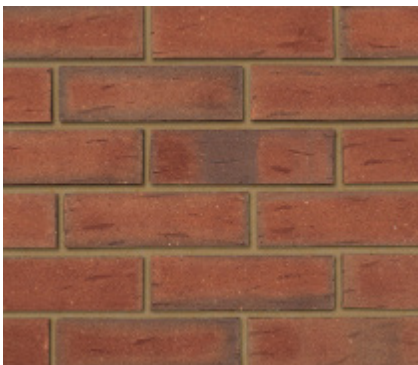
The design follows a simple concept based on the clarity of the overall structure of the building. This simplification stops the structure imposing restraints upon individuals using and moving through the building. This will be ensured by the lack of obstructions in pedestrian/common areas.

Internal floor surfaces

The floor finishes of all common areas will contrast tonally with the walls and will be non-slip. Finishes should be contrasting in the vertical and horizontal situations. Floor surfaces will not be overly resistant to wheelchair users, but will aid crutch users in gaining purchase.



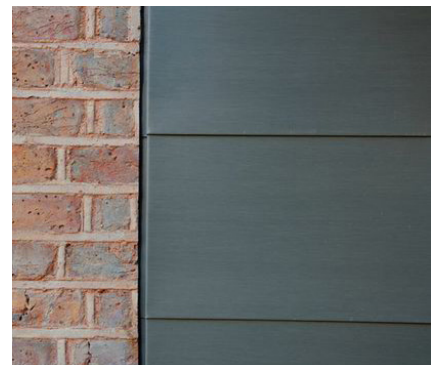
Aluminium windows



Red facing brickwork



Slate roofing



Aluminium cladding panels



Entrances

Each component building provides a correct transition from outer spaces to inner spaces to all users. The approach to the buildings will be well lit and obvious.

Transition to Internal

The glass around the entrances will have manifestation to identify them, and the frames will be of a strong tone or colour to visually separate them from the surroundings. Any glazing will have manifestation and the spaces will be appropriately lit. The main entrance doors are designed to comply with Building Regulations and 'Wheelchair Housing Design Guide' in terms of minimum width opening and closing and the thresholds will be level.

Opening windows and projections on public routes

Obstructions at head height can be dangerous to the visually impaired. All opening windows and projections have been minimised within the design. Where possible, outward swinging doors are avoided and, where required due to fire escapes, they will be marked by blistering or bollards.

Steps and ramps

This subsection describes how connections are solved between areas with different levels in relation with their users.

All steps, stairs and ramps will be designed to comply with the 'Wheelchair Housing Design Guide', Approved Document Part M, and BS 8300:2009. This includes tread, risers, handrails, lighting and nosings.

Door design

All the doors of the scheme, either manually operated or automated, are compliant with Approved Document Part M and BS 8300:2009 according with different uses and users of the buildings, specifically in relation to vision panels, weight, colour, door ironmongery and use of materials.

To meet the requirements of Approved Document Part M door closer tensions will be set to a maximum of 20N. The clear opening widths of all doors in common areas will be a minimum of 800mm and there will always be 300mm of clear space on the leading edge of a door. This latter point is particularly important on the pull side of a door.



Movement within buildings

This relates to the internal circulation within each building considering specific needs of disabled people. The buildings are accessed via horizontal corridors. Vertical circulation is via lifts in the cores, and ambulant disabled stairs.

Provisions of lifts

All lifts, in all buildings, will be provided to comply with Approved Document Part M and BS 8300:2009, including size, internal materials, door opening width, and operating apparatus.

Stairs

Stairs will comply with Approved Document Part M and BS 8300:2009 in terms of widths, treads, risers, hand rails, nosings, top and bottom surfaces, landings and finishes.

They will also be designed for ambulant disabled users, including the fire escape stairs.

Corridor and lobby design

All the corridors within the buildings will comply according with their specific uses and with Approved Document Part M in terms of size, lighting, materials, signings, doors and colours etc. Typically these are designed to 1600mm clear widths in all residential communal corridors.

There are no changes in level to any corridors and width is consistent, except outside lifts where corridors widen to aid wheelchair users to manoeuvre with ease. Vision panels in corridor doors will be designed to allow people both seated and standing to be seen.

Pull handles will only be fitted on the pull side of doors and fingerplates will be fitted on the push side. This assists all users, but especially people with learning difficulties and people with visual impairments. Handles will not extend down to floor level since this type of handle can become caught in the footplates or wheels of a wheelchair.

There will be adequate space between lobby doors for a wheelchair user to clear one door before opening the next.



7.7 MEANS OF ESCAPE

Design for independent means of escape

All features and materials comply with Approved Document Part B (2004). In addition, a management plan will be prepared for the evacuation of the buildings together with the preparation of a Personal Egress Emergency Plan.

With residential buildings, it is encouraged that, in the case of fire, inhabitants stay in their apartments. Each apartment has a 60-minute fire rated compartment surrounding it, to ensure that residents are protected from the source of the fire.

Facilities for physical evacuation

The escape routes, horizontal and vertical, meet the minimum widths to comply with ambulant disabled requirements. Escape stairs meet ambulant disabled goings and risings. At upper residential levels, the fire strategy is for people to remain in their apartments while the fire brigade respond to the emergency.

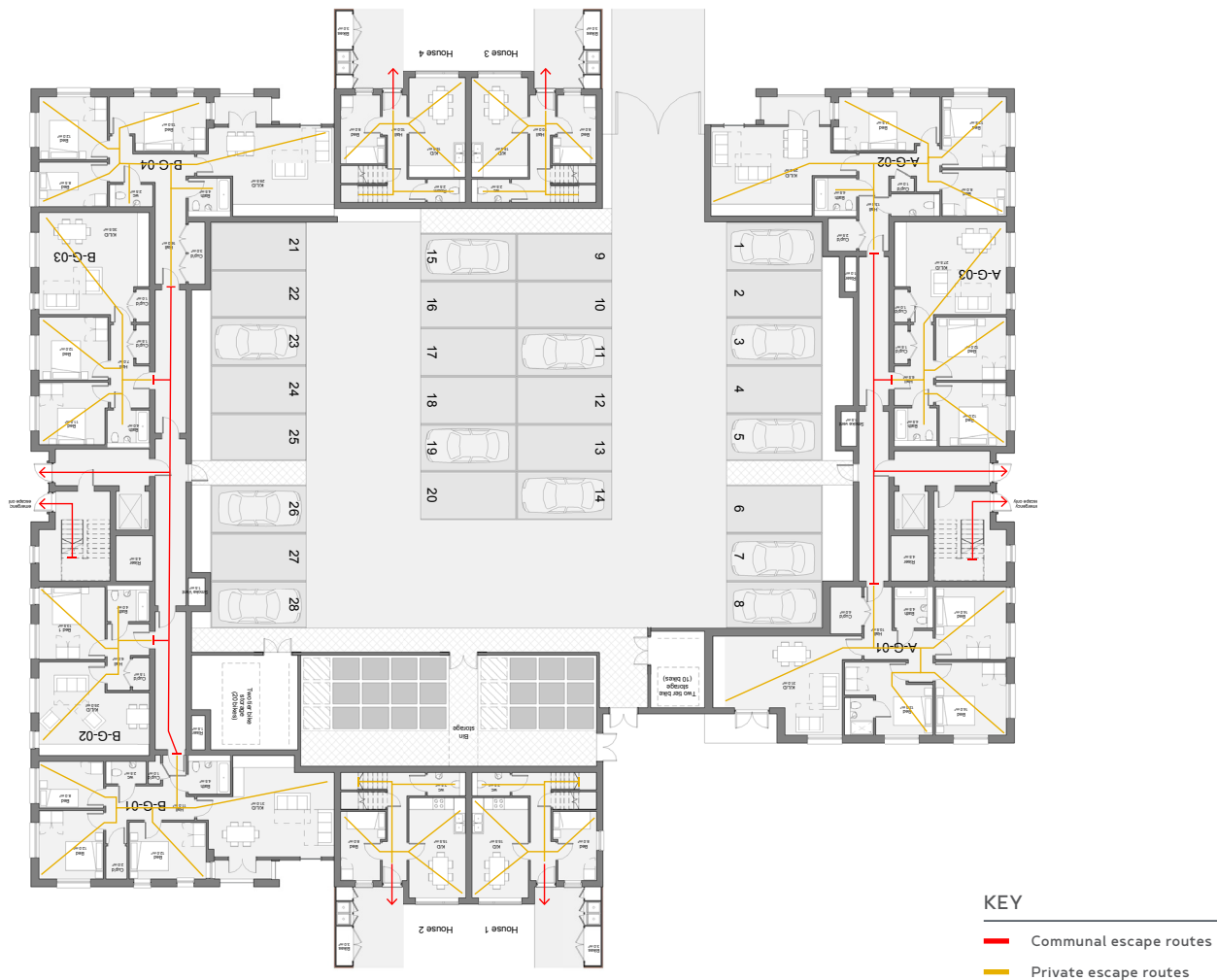


FIGURE 79: ESCAPE ROUTES



7.8 SIGNS AND WAYFINDING

External signage

The signage strategy for the development will follow good practice guidelines, such as the “Sign Design Guide” from the Sign Design Society and the Royal National Institute of Blind People. All signage will be contrasting and designed for those with learning difficulties or visual impairments.

Internal signage

The signage has been designed to enable clear signposting and a messaging system to comply with the Sign Society Guidance.

All internal signs to communal areas will be clear, with contrasting symbols, and with braille translations to help the visually impaired. All signage will be located in obvious locations and well lit.

The use of differing tactile materials

A palette of tactile handrails/support rails showing directions of travel to the nearest fire exit have been considered through the design of this proposal.

The layout of the buildings

A clear layout of each floor generally arranged with a sequence of: entrance / lobby / lift / stair-core / corridors allows a simple circulation throughout and between the floors. A readable structure and shape provides an easy indication to distinguish different uses within the scheme.



FIGURE 80: ENTRANCE TO SITE FROM ADDISON ROAD



7.9 LIFETIME HOMES, SPACE STANDARDS

The scheme has been designed in accordance with Lifetime Homes. All units in the scheme have been designed in accordance with the Technical Housing Standards – Nationally Described Space Standards and Lifetime Homes.

All units are fully compliant with Lifetime Homes. Internally all units achieve the overall unit volume, and internal room space standards in the NDSS.

The Lifetime Homes Principles

The Lifetime Homes concept is based on five overarching principles. These inform and establish the functional basis for the statements of principle that have been introduced for each of the sixteen Lifetime Homes criteria.

Principle One: Inclusivity

Principle Two: Accessibility

Principle Three: Adaptability

Principle Four: Sustainability

Principle Five: Good Value

